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(The opinions expressed in articles in The Canadian Chartered Accountant are the opinions of the writers of the articles and are not necessarily endorsed by the Association).

Editorial Comment

Economic Conditions

The annual reports of the Canadian chartered banks made during the past month are of more than ordinary interest. From their contact with the many ramifications of trade and industry throughout the Dominion and the world, the banks are closer to the pulse of business than any other body or institution and are in a position to diagnose with fair accuracy present economic conditions and to estimate future trends in industry.

According to the annual report of Mr. A. E. Arscott, general manager of the Canadian Bank of Commerce, the year 1937, like the intervening years since 1933, was mainly one of progressive adjustment. In several branches of our national economy a record level of productivity and employment was attained. One of the outstanding examples was the expansion in the heavy industries, those of steel products and automobiles deserving special mention. A feature of the heavy industries that has received wide recognition is the introduction of many new products which were evolved during the depression period and which have contributed to greater stability in operations.

Canadian mines recorded a total production of $450,000,-000, and mineral exports were 170% above those of six

years ago. "This figure of production," Mr. Arscott very properly points out, "represents only a net result; many branches of industry benefited from mining activities because these operations involved heavy demands for equipment and materials. Moreover, mining has to its credit a more stable record of employment in the depression years than other leading industries."

According to President S. H. Logan of the same Bank the year 1937 was one of the most favourable that many Canadians have ever enjoyed, the notable exceptions to increased activity over 1936 throughout the Dominion being Saskatchewan and Eastern Alberta. Mr. Logan refers to an important fact that many of us have possibly failed to recognize, namely, that in the areas showing advances over the previous year are to be found eighty-five per cent. of the people of the Dominion. Fortunately these sections supplied the reserve of economic strength which was needed to sustain some Western areas in their misfortunes and distresses.

Importance of Export Trade

Another interesting observation by Mr. Logan is that the progress in Canada during the past year was due largely to our export trade which supplied the people of Canada with a new fund of purchasing power amounting to hundreds of millions of dollars and helped to provide foreign exchange with which to meet external debts. "We continued last year, therefore, to derive a twofold advantage from our foreign trade," states Mr. Logan, "first, the employment of labour and other services necessary for the production, processing, transportation and distribution of our exportable commodities; and second, a wide range of domestic activities consequent upon the return flow of trade in the form of essential imports."

Canada ranks fifth in world export trade, but as her population is the smallest of the first eight world ranking countries her productive capacity for export, after providing for our high national standard of living, is the greatest per capita. Is it not remarkable, then, that Canada with a population of less than twelve millions was able to produce exports last year about one-third as large as those of the United States, a more highly developed nation of great natural resources and with a population of nearly one hundred and thirty millions?

A fact that many people and nations unfortunately fail to recognize is that in the final analysis a country's exports and imports will balance — they must be of equal value. The experience of Canada last year is a lesson on the advantages of freer trade and the folly of maintaining high tariffs that is sufficiently practical for all nations of the world to study. Carrying the subject of trade still further, Mr. Morris W. Wilson, Chairman of the Board of Directors of The Royal Bank of Canada, stresses a matter of world importance when he observes that "The hope for world peace depends upon international economic reconstruction. Improvement in economic conditions will go far to right political difficulties. International trade is peculiarly necessary to Canada, and for Canada to be one of the countries giving leadership to the restoration of international trade would be both to serve her own interests and to aid in that economic rehabilitation which is pre-requisite of a constructive peace."

Future Outlook

Canada with her vast natural resources, her wide range and variety of products which the world so greatly needs, and the industry, capability and enterprise of her people, is, in the opinion of Mr. Arscott, in a more favoured position than almost any other country to withstand any temporary recession in general trade and to participate fully in the advance which will inevitably occur when the necessary adjustments have been made and confidence again restored. Mr. Wilson refers also to important factors which are exerting influences on our progress and which are encouraging signs for the coming year, namely, the reasonably harmonious relationship between labour and employers, the high degree of co-operation that has been maintained between the government, financial institutions and business, and the very satisfactory fact that economic recovery in Canada has taken its origin from foreign trade not from government expenditures vastly in excess of revenue.

This year's annual reports of the chartered banks, as in previous years, point to the urgency for the full economic activity of all nations for the prosperity of all. This fulness can be achieved only by well balanced production and trade. It means that the future progress of Canada, and of every other country, depends on a state of international peace and a mutuality of respect among all the nations of the world.

Defalcations of Employees

"Your friend has not been in of late, is he away?" we enquired of a fellow-member at the club the other day. "Jim is not very happy these days," was the reply, "he has just discovered that one whom he trusted has been robbing him for years." And we learned the story of how the fire insurance firm of which Jim is a partner had had in its office for fifteen years a trusted employee who, it was now discovered, had during that time defrauded the company of thousands of dollars. No fidelity bond had been deemed necessary; no audit of his accounts was ever required; and the defaulter today cannot make restitution even in the smallest degree. There was some reason for Jim's depression.

This case coming as it does so soon after the reference made last month to the defalcations of municipal treasurers must raise in the reader's mind the question, "Did this trusted employee deliberately set out fifteen years ago to defraud his employers?" While a definite answer cannot be given, investigations in numerous other cases have shown that in nearly every instance of embezzlement the thought of misappropriating funds had never been entertained for a moment at the beginning of the employee's career. Yet after fifteen years there was in this case, as there has been in hundreds of similar ones, a shortage of a very large amount of money; how could it possibly have happened?

In their everyday practice members of the accountancy profession not infrequently uncover defalcations and other dishonest practices. Such discoveries afford some opportunity of studying human nature and of getting an insight into the character of the one who, taking liberties with his employer's property, discovers himself heavily in debt to the firm's cash drawer and unable to make restitution. What sort of person, then, is this embezzler who up to a point of time was an earnest, honest individual with a satisfactory business reputation and a good future before him?

The Typical Embezzler

As theft claims are received daily by the surety companies on this continent, their files of actual cases contain some enlightening facts and figures. We are indebted to the United States Fidelity and Guaranty Company of

Baltimore for furnishing particulars from a study made by them of "a thousand and one" cases (963 men and 38 women) taken at random.

An examination of these cases reveals the typical embezzler as thirty-six years of age with a wife and two children to support. He is not of feeble mind, but on the contrary has an average intelligence. He is not a hardened criminal, nor does he live in a neighborhood where crime exists. He has received a fair education, his upbringing has been good, he lives comfortably, is a good mixer, participates in social and community affairs, takes liquor occasionally and owns a medium priced automobile on which a balance is still owing. He is to be found in every province of Canada and in every part of the United States. He is in posts of varying importance from watchman in the warehouse to president of the company. In many cases he is the cashier, but in numerous others he handles no money and is in positions where possibilities of embezzlement seem quite remote. Sometimes he works in collusion with others; for the most part, however, he avoids taking anybody into his confidence and prefers to act alone. No section of the mercantile and industrial world is without him; he is found in every kind of manufacturing business, with mining and lumber companies, with brokers, wholesalers and retailers, and with publishers, theatres and hotels. Even hospitals, churches and religious organizations are not exempt from his manipulations and raids upon the treasury.

Occupations And Ages

A survey of the occupations of these men shows that 115 were salesmen, 262 were representatives of oil and gas companies, insurance, motion picture, automobile and advertising companies, 201 were branch managers, 105 were cashiers and collectors, 69 were bookkeepers and 66 executive officers and treasurers; the remainder were in a variety of positions of trust. Of 38 women, 30 were cashiers and bookkeepers. A study of the ages reveals the interesting information that 24% of the men and 34% of the women were under thirty years; 44% and 37% respectively were between thirty and thirty-nine years; 21% and 24% between forty and forty-nine years, and the few remaining were scattered all the way between the ages of fifty and eighty-five.

Motives

How did the persons whom we have described come to be thieves? An inquiry into their history by the Guaranty Company reveals the fact that the great majority lived beyond their means and that, had they disciplined themselves through possible economies, the temptation to embezzle would probably never have arisen. In fact the downfall of over 34% of the women and 17% of the men was traceable directly to this cause. Often the embezzler has domestic troubles—a wife who is a spendthrift or an invalid, ailing children or an ambitious family whose wants are hard to satisfy. He himself may have companions who lead him into drinking, gambling and speculations; his debts mount and in order to ease the pressure of creditors he uses his employer's funds. And the strange part of it all is that he regards this as only a temporary borrowing; he never considers himself in any wise a thief. Of the 963 cases of men mentioned, 13 were operating another business, 14 were mentally irresponsible, 18 had an inadequate income, 57 had sickness in the family, 84 were engaged in speculation, 102 had become infatuated with other women, 133 were bad business managers, 156 allowed their debts to accumulate, 161 lived above their means, 169 indulged in drinking or gambling, 41 were criminal characters, and the remaining 15 "borrowed" for various reasons. In the case of the 38 women, 24 had an accumulation of debts or were living above their means.

For most of these unfortunates the trouble started when the first money was taken and the theft not discovered. At this particular point we think that employers are much to blame for failing to have an effective system of internal check. With no adequate check present the temptation to repeat the act could not readily be resisted; other peculations soon followed and became more frequent and of greater amount. The race horse backed did not prove a winner; the stocks bought on margin did not take the expected rise; and the need of additional cash became more and more pressing. When the thefts came to light, little or not any of the embezzled funds or goods was available for making restitution.

The Auditor and The Embezzler

Unless some form of internal check is present the schemes of the transgressor may remain hidden for years, or may never come to light, restitution in some

cases having perhaps been made. The regular audit by professional accountants is a valuable safeguard, but it is no guarantee that every type of fraud has been disclosed in the accounts examined. The auditor is expected to exercise skill and care in his work, but to give an abstract definition of the degree of skill and care is not possible, or as Mr. Justice Lindley stated in *In re London and General Bank* (1895), "What is reasonable care in any particular case must depend upon the circumstances of that case. When there is nothing to excite suspicion very little enquiry will be reasonable and sufficient . . . . where suspicion is aroused more care is obviously necessary." Mr. Justice Alverstone also stated in the *London Oil Storage Company* case (1904), ". . . . if circumstances of suspicion arise it is the duty of the auditor, in so far as these circumstances relate to the financial position of the company, to probe them to the bottom." By way of illustration may we mention a case which came to our attention a few years ago in one of our Western provinces? A chartered accountant and his assistant were examining the accounts of a department of government which was almost altogether under the control of one official. The invoices for purchases of building materials had been approved by this official and cheques duly issued by the treasurer in payment. There was nothing in the transactions to excite suspicion. The street address of the company, however, happened to arouse the curiosity of the auditor since it was on his usual route to his office and he could not recall ever having seen a lumber yard there. On investigation the address proved to be that of a vacant lot. Confronted, the official confessed to frauds extending over a considerable length of time amounting to hundreds of dollars of government funds, and to having the necessary stationery printed in another city to avoid arousing local suspicion.

While many frauds are disclosed by the regular audit of the records of companies—and no one can estimate how many frauds are prevented by the watchfulness and regular examination of the auditor—such an audit must not be regarded as a guarantee that all frauds are brought to light. The number of daily commercial transactions of our modern corporations render it physically impossible for the outside auditors to check all transactions, and most large firms have a permanent staff of internal auditors for this

purpose. Perhaps the best assurance against theft and other frauds is the regular examination of the accounts by outside auditors, together with an effective system of internal control that is followed to the letter, that is ever under the vigilance of senior officials and that is receiving the co-operation of all concerned.

Inventory Valuation

The valuation of inventories is a subject that will continue to demand increased thought and study on the part of industrialists and members of the accounting profession. The Editorial Committee is pleased to bring to readers this month the thoughtful address of Mr. Davis of Boston on "Inventory Valuation and Business Profits."

The employment by a company in Canada of a method of valuing inventories similar to the one described by Mr. Davis was the subject of not a little unfavourable newspaper discussion a year or two ago. There must be a viewpoint with respect to all opinions on economic and fiscal problems. The principle of "cost or market, whichever is lower" can accomplish its objective of a conservative inventory valuation from a short-term standpoint; but everyone giving study to this subject will without doubt agree that the "basic" method described by Mr. Davis takes a longer view and gives consideration to the economic cycle and the return again to a low level after an interim of a high price level. The Editorial Committee will welcome at any time the views of members on the subject of inventory valuation.

COSTING AND CONTROL IN A SHOE MANUFACTURING BUSINESS WHICH OPERATES ITS OWN RETAIL OUTLETS

By Rutherford Williamson, F.C.A., Toronto

AN attempt is made in the following article to give a concise outline of the methods of control used by a manufacturer of men's quality shoes. This firm, in addition to manufacturing, operates its own retail stores in the larger cities of the Dominion. With the exception of a few agencies, the company directly controls the sale of its product to the public. The business is organized into three definite departments:

(1) Manufacturing department
(2) In-stock warehouse
(3) Sales distribution department

Manufacturing

As a preliminary to the determination of manufacturing requirements a study of markets and sales requirements is always necessary. A thorough market analysis is made to determine the consumer demand in general, and in each territory for each type of product manufactured. This study is extended to include possible markets for similar products which can readily be added to meet competitive lines. With this data available it is not necessary to guess at sales requirements. A sales budget is prepared during the current year for the ensuing one by keeping note of the sales monthly by quantities and lines and for each selling centre. At the end of the year this information is revised by eliminating any discontinued lines and substituting the new lines to be introduced.

Because of the importance of the sales budget in determining manufacturing requirements a brief reference to it at this point is in order. To be of real value such a budget must be carefully built up. Every salesman is given an opportunity to present his case. If he agrees to sell certain lines and quantities it acts as an incentive throughout the ensuing year. A sales budget imposed by the sales manager without consultation with the salesman does not get the best results. Since a sales budget leads to a predetermined turnover, this turnover must be accompanied by a proper margin of profit if the company is

to prosper. For this reason the budgets submitted by the salesmen have to be tempered by the experience and judgment of the management and compared against the past performance of each salesman. Very often they will budget lines that carry little profit; experience would suggest that salesmen frequently exert all their efforts on just such lines. Naturally they tend to follow the path of least resistance, and they periodically come forth with the suggestion that so much more business could be had if head office would only allow them to take business below the fixed prices. For this reason it is wise for the sales manager to acquaint the salesmen with the lines that carry little or no profit and to urge them to push the profitable ones. The budget should not contain quantities of lines beyond the factory's physical ability to produce. Once a line is sold up it should be promptly withdrawn otherwise the company would have a number of dissatisfied customers as well as dissatisfied salesmen.

From the predetermined sales budget the management is enabled to gauge its material requirements and to gauge the pairage to be put into production weekly to take care of its sales demand. The management anticipate their raw material requirements three to four months in advance, but seldom beyond that, their policy being not to speculate in raw materials — the company is in the shoe, not the leather brokerage business. A manufacturing budget is thus prepared using the standard cost system, and Exhibit No. 1 illustrates the standard cost sheet used.

Exhibit No. 1

Name of Firm

SUMMARY UNIT COST SHEET OF MEN'S SHOES

Date

Style—	Leather—	Grade—
Last No.—	Sole—	Stock No.—

	Quantity	Price	Extension	
1. Upper materials:		For 100 Pairs		
Vamp	....	....	....	
Tip	....	....	....	
Quarter	....	....	....	
Quarter lining, #1 Ex. St.	....	....	....	
Vamp lining & tongue	....	....	....	
Interlining	....	....	....	
Tongue lining	....	....	....	
Toe oil sheeting	....	....	....	
			....	....
per pair			....	

2. Bottom materials:				
Outsole	....	....	....	
Slip or double sole (half)	....	....	....	
Insole	....	....	....	
Counter	....	....	....	
Heel	....	....	....	
Top-piece	....	....	....	
Welting	....	....	....	....
Box toe	....	....	....	
Seat pieces	....	....	....	
Bottom filling	....	....	....	
Shanks	....	....	....	
Heel socks sheep	....	....	....	
			....	....
per pair			....	
3. Findings, per statement (see Exhibit No. 1a)				....
Total cost of materials				....
4. Direct labour				....
5. Manufacturing expenses				....
6. Selling expenses				....
7. Administration expenses				....
Total cost per 100 pairs				....
Total unit cost				....

Explanations:

Exhibit No. 1a

Name of Firm

LIST OF FINDINGS USED IN GRADE STOCK No.

	Quantity	Price	Total
Cement	....	....	....
Cotton thread	....	....	....
Silk thread	....	....	....
Linen thread	....	....	....
Eyelets	....	....	....
Labels	....	....	....
Vamp stays	....	....	....
Box toe gum	....	....	....
Hand and machine tacks	....	....	....
Toe wire	....	....	....
Shoe paste	....	....	....
Sole sewing thread	....	....	....
Welt sewing thread	....	....	....
Stitching and welting wax	....	....	....
Seat and heel nails	....	....	....
Slug wire	....	....	....
Edge setting ink	....	....	....
Finishing wax	....	....	....
Shoe dressing	....	....	....
Shoe laces	....	....	....

Cartons, plain	....	....	....
Wrapping paper	....	....	....
Gold leaf, small die pure gold	....	....	....
			....

Exhibit No. 1 carries the generally accepted classification of the elements of cost entering into a pair of shoes. Materials are classified into upper materials, bottoms materials and findings materials.

All incoming materials and supplies, after being checked as to prices and quantities, are delivered to what is known as the closed stores warehouse. All material withdrawals therefrom are on requisition over the signature of a foreman. This warehouse is under lock and in charge of a special clerk. A perpetual inventory of these stores is kept, which is verified semi-yearly by a physical count by independent clerks. It is unusual for the inventories of this warehouse, when taken, not to agree with the book figures as kept.

An open stores account is kept in the general ledger showing the value of materials circulating through the factory and in course of manufacture. This is also verified twice each year by physical count.

The wages are classified into direct or productive wages, and indirect wages. The productive wages are divided into the following departments:

(a) Cutting
(b) Fitting
(c) Lasting
(d) Bottoming
(e) Finishing

The names of the employees on the wage roll are classified according to departments, and the wage roll is sub-totalled in accordance with the above classification. Daily, accumulated weekly and monthly records of the production in each of the departments are kept, and from these records an interdepartmental control of quantities is kept and unit labour cost by departments established. The unit cost thus furnished is compared with the previous records and in the event of any wide fluctuations the reason for such changes is quickly ascertained. The factory is operated on an hourly payroll basis rather than on piece work. The latter

pay system would tend to hurry the workmen and to thus deter the quality workmanship which is the firm's policy. All merchandise leaving the finishing department is invoiced to the in-stock warehouse at the retail selling prices less predetermined discounts. Thus these transfers are in reality the factory sales and the in-stock warehouse purchases.

A standard stock sheet (Exhibit No. 1) is prepared for each line that is manufactured. The production leaving the finishing department is tabulated by lines and quantities monthly, together with the elements of cost entering into such production. Material, labour and overhead standard costs are ascertained and compared with the actual labour and overhead monthly, and with the elements of materials semi-annually at stocktaking time. In order to enable the monthly statements to be prepared, a predetermined material unit cost is used.

The statement of manufacturing overhead, as illustrated in Exhibit No. 2 does not require any special comment. Depreciation, taxes, insurance and other items are accrued monthly and the liability for the same is set up in the accounts payable ledger. The company breaks its fiscal year into thirteen periods of four weeks each. This facilitates stocktaking and avoids the problem of having to accrue wages and other items. Comparison of periods is also aided.

Exhibit No. 2

Name of Firm
STATEMENT OF MANUFACTURING OVERHEAD
Date

1.	Non-productive labour, superintendent, foreman, management, etc.		....
2.	Rent or depreciation of buildings		....
3.	Taxes, city and business		....
4.	Light, heat and power		....
5.	Machinery rentals and royalties		....
6.	Machinery maintenance and repairs		....
7.	Depreciation of machinery, 10 per cent.		....
8.	Fire insurance		....
9.	Workmen's compensation insurance, etc.		....
10.	Lasts, patterns and dies		....
11.	Travelling, buying, etc.		....
12.	Sundry manufacturing expenses		....
	Employees' life insurance premiums	....	
	Manufacturing sundries	....	
		....	
			....

Exhibits No. 3 and No. 4 of selling and administrative expenses are applicable to the company and do not contain any extraordinary features.

Exhibit No. 3

Name of Firm
STATEMENT OF WAREHOUSE AND SELLING EXPENSES
Date

1.	Salesmen's salaries, commissions and expenses		....
2.	Branch office expenses		....
3.	Sample expenses		....
4.	Advertising, catalogues, etc.		....
5.	Outward freight, express and cartage		....
6.	Bad Debts		....
7.	Discounts allowed		....
8.	Sales executives' salaries and expenses		....
9.	Sundry Expenses		....
	Shipping wages	....	
	Warehouse rent	....	
	Insurance premiums	....	
	Travelling expense	....	
		....	
			....

Exhibit No. 4

Name of Firm
STATEMENT OF ADMINISTRATION EXPENSES
Date

1.	Management executives' salaries	....
2.	Office salaries	....
3.	Telephone and telegrams)	....
4.	Postage)	
5.	Stationery and office supplies)	
6.	Management executives' travelling expenses	....
7.	Legal and audit fees	....
8.	Association fees and expenses	....
9.	Interest and bank charges	....
	Less Discounts allowed	
10.	Miscellaneous	....
		....

The accountant furnishes the management monthly (every four weeks) with a condensed trading and profit and loss statement of the factory's operations as shown in Exhibit No. 5. A close study of this exhibit reveals the trading results in condensed form expressed by value and percentage. It has been found that by expressing the sales dollar by percentage a quick and ready comparison is possible.

Exhibit No. 5

Name of Firm
FACTORY MANUFACTURING, TRADING AND PROFIT AND LOSS STATEMENT
Date

			Per cent. of net sales
Sales, *less* Returns and allowances....		....	....
Cost of goods manufactured:			
Materials used	....		....
Direct labour	....	....	....
Manufacturing expenses (Overhead) .... (as per detailed statement)	....		....
	....		....
Gross profit in manufacturing	....		....
	....	....	....
Gross profit brought down		....	....
Warehouse and selling expenses (as per detailed statement)	....		....
Administration expenses (as per detailed statement)	....		....
Total expenses	....		....
Net operating profit to surplus account	....	....	....
	....	....	....

Exhibit No. 5a

PROFIT AND LOSS STATEMENT FOR PERIOD 19 .

	Current Month	%	Same Month Last Year	%	1937 Year to Date	%	1936 Year to Date	%
Cost of materials used								
Direct labour								
Overhead								
Prime cost								
Sales								
Gross profit								
Selling expenses								
Net profit or loss								
Production by Quantities:								
Average cost of material per pair								
Average cost of labour per pair								
Average cost of overhead per pair								

Average total cost per pair	
Average selling value per pair	
Net profit or loss per pair	

In-stock Warehouse

The in-stock warehouse is the most important department in the retail shoe business. This is the reservoir that supplies the sales outlets with their requirements as to quantities, lines and sizes.

Few things arouse a customer's resentment more quickly than an ill-fitting pair of shoes. One of the most difficult problems of a shoe store is to maintain a reasonable range of sizes and styles while avoiding an overloaded or unbalanced inventory. To be in a position to sell, a shoe store must carry from forty to one hundred pairs in every one of possibly forty to fifty styles of shoe. A customer may require any one of approximately ninety different fittings, which comprise the range of men's shoes. The turnover is greatest in twenty-four of the middle sizes. These furnish 70% of the total sales. As the "end" sizes are approached the sales ratio drops off; for example, a middle size such as 8D sells thirty-five times faster than a small size such as 5D. The distribution of sizes to the branch stores and their maintenance in correct sales ratio is controlled by a system of visible card records.

Once a month each store forwards to the warehouse a number of size cards on which are recorded the quantities and sizes in stock in each style of shoe. The stockkeeper checks these cards with his reserve stock and forwards any missing sizes to the stores requiring them. The cards are then filed according to stock number. The condition of the stock in all branches may thus be ascertained at a glance. The stores also submit a daily list of their sales stating the stock numbers and sizes sold so that quick replacement may be made from the reserve stock. If for any reason a particular size cannot be replaced immediately it is erased from the card of the store concerned. This automatically records that pair as an "unfilled order," to be filled when the required size arrives from the factory. This visible record not only furnishes a perpetual inventory of the sizes

and quantities on hand in every stock number, but also discloses the presence of unnecessary surplus sizes in smaller branch stores. Such surplus is recalled and distributed to other stores in need thereof. In the more popular lines each store carries extra pairs in the middle sizes. The slow moving "end" sizes must be stocked more conservatively. The temptation to carry too many of the latter for the sake of completeness has to be constantly resisted. If a store permits 25% of its shoe stock to be tied up in a field yielding only 5% of the total sales, it not only slows up turnover but may become the source of a serious "hidden" loss.

The stock sales of the various stores are also analyzed so as to show how many pairs each has sold over a given period in any particular stock number. If a line appears to be inactive in an out-of-town store, it is subject to recall. Regular inspection of this sales record helps to prevent the accumulation of dormant stock.

Purchasing of Replacement Stock

After the requirements for the following six months have been budgeted, the purchasing department must decide into what lines and finally into what individual sizes it will place its orders. For this purpose a large stock book is used in which the sheets are ruled off according to sizes and widths. Herein are entered the sizes on hand in all the stores, in the warehouse and those in process. A separate sheet is devoted to each style of shoe. Each pencil stroke on these sheets represents a single pair of shoes. The stock sheets for the previous year show not only the quantities sold in each stock number but also the number of pairs sold in each size. These figures are used as the basis for computing a maximum and minimum stock level for every size. The sizes sold each day throughout the entire chain are crossed off the book; when the stock drops below the required level, orders are placed with the factory to make up the deficiency. The maintenance of this book may seem to involve a great amount of detail, but the accurate control of slow moving lines has more than justified its use. The past sales performance of every single size is visibly recorded.

Sales Distribution

The potential sales of each territory are projected, based on population and past performances. At the beginning

of each year each store manager is advised of the pairage sold during the past year and advised of the number of pairs of shoes he must sell per day and per year if his store is to break even.

The accounting records for the stores and the agencies are very simple, and all general ledger accounts controlling the branches are kept in the general ledger at head office. The following records are kept by the branch stores and the agencies:

(a) Two bank accounts, one subject to the withdrawal of both head office and the local manager and the other not subject to withdrawal over the signature of the local manager. An amount is transferred to the former bank account every month to take care of the salaries and other expenses of the branch.

(b) An accounts receivable ledger—to record charge sales.

(c) The branch stores daily sales sheet, together with a certified copy of the deposit for the day, and copies of the individual sales slips. The clerk at head office checks the daily cash receipts with the slips. The slips are then returned to the respective stores and there filed in alphabetical order. The local manager thus has a permanent record of his customers, their size, style preference and past orders. The sales sheet provides for the amount of cash or charge sales, the classification of these by quantity and value in shoes and other sundry sales items and the bank deposit. At the foot of these daily sheets is a summary of the sales by salesmen. This enables the management to gauge the performance of each salesman and to compute the monthly overriding commissions. One copy of the daily sales sheet is kept in a binder by each branch. At the end of each period (four weeks) each branch makes a summary of the sales for that period and forwards this to head office.

(d) A summary of the cash receipts and bank deposits.

(e) A summary of the cash disbursed from the expense bank account, summarized in a predetermined standard form and showing the reconciliation of the bank accounts.

(f) A summary of their physical inventory and the reconciliation of the inventory of merchandise on hand by lines and quantities. This is in addition to the information

that is forwarded to the in-stock keeper, and is in reality an analysis by sizes and widths of the shoe inventory on hand at the close of each fiscal period. A detailed list of outstanding accounts receivable is also furnished by each branch, analyzed by the age of the accounts.

From these monthly returns the head office accounting department posts to the respective trading accounts in the head office general ledger, and prepares monthly trading results for each branch. In order to have accurate trading results for the month, rent, taxes, water rates, insurance, advertising, and other expenses are accrued monthly. Cost of sales is established on a predetermined percentage basis which is confirmed by semi-annual physical inventories taken by chartered accountants. Each clerk handling cash is bonded.

Quantity Control

The management insist upon accurate and definite records of quantity control in respect of all the lines of merchandise carried. In order to facilitate the reconciliation of these quantity records the head office mails to the respective stores a recapitulation of each store's weekly purchases, thus acquainting the store managers with the total amount of goods invoiced expressed by value and by quantities. It has been found that the quantity control is most effective.

In the event of any shortage in quantities reported by the stores, immediate explanations are demanded by correspondence. If such explanation is not satisfactory an independent physical count is made by chartered accountants. In one such case the auditors reported a shortage of ninety pairs. The manager of the store in question was telephoned by long distance and admitted that he suspected one of his clerks. He was instructed, therefore, to check the quantity of certain fast selling lines prior to his going to lunch and upon his return. Inside of a week he noted that certain shoes had disappeared during his absence without having been accounted for. The clerk admitted having stolen the proceeds. The cost of this investigation by telephone was about twenty dollars and recovery was made from the bond company for the full amount of the loss.

In another instance head office quantity control quickly detected a similar shortage in an agency. At the end of the fiscal period an independent clerk was sent to make a

physical count of the merchandise on hand. This was found to agree, but the accounts receivable were found to be abnormally large. The agency clerk had appropriated cash sales and treated them as charge sales.

Monthly Information to Management

Not later than the fifteenth of each succeeding month the accounting department furnishes the management with:

1. A summary of sales covering the various subdivisions, showing the sales for the month, for the same period last year and the same information in accumulated-to-date form.

2. Retail sales by quantities of merchandise sold year-to-date, compared with the same period last year, the total shoes sold to the warehouse year-to-date and the total retail sales year-to-date.

3. A balance sheet drawn up on standard form.

4. A profit and loss statement for each of the sales divisions.

5. The factory production for the month under review broken into cutting, fitting, lasting, bottoming, treeing and finishing, with the amount of wages in each one of these departments expressed by unit cost, the average wages to date, the total overhead for the period, the average production for the period, and the average overhead per unit to date in comparison with the same period for the previous year.

The general ledger accounts are arranged so as to facilitate quickly the preparation of the above monthly accounting schedules.

The system explained above may seem to be bulky and cumbersome, but in practice the actual accounting involved, as well as the regular accounting tasks, is performed by a very small accounting force.

INVENTORY VALUATION AND BUSINESS PROFITS

The Case for a "Stabilized" Basis

By Albion R. Davis, Controller,
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[*Editor's Note:* We are indebted to the National Association of Cost Accountants, New York City, for permission to publish Mr. Davis' address which appeared in its *Bulletin* of 1st December last.]

IT IS, perhaps, no more than right that we should first establish the importance of our case. Why do we feel justified in putting this subject of inventory valuation alongside of such vital matters as have commanded your attention at the other meetings of this year? Your time is valuable and there are many important topics in business and accounting today which are demanding your thoughtful consideration. Is this matter of the effect of inventory valuation on business profits just a bit of theoretical whimsy, or is it something which is important enough and practical enough to rate a place on your program.

Relation of Profit and Loss Experience to Raw Material Price Changes

I know of no better way to begin, in establishing our case, than to ask you to consider for a moment the first chart (at the end of this article) showing the profit and loss experience of four leading tanning companies during the period from 1926 to 1935. In 1932 these companies showed a combined loss of over six million dollars. The next year, in 1933, this had changed to a profit of six million only to swing back to a loss of two million the next year. In another year this had changed again, and there was a profit of nearly four million. We could use other industries for purposes of illustration, and the showing would be more or less the same.

Against this chart of yearly profit and loss for these tanning companies, we have plotted the yearly changes in prices of raw materials in the tanning industry. Please note that every year in which prices were less than in the previous year a loss resulted, while with one exception every year in which prices were higher than the year before a profit resulted. This is not just an accidental correlation. Under the "cost or market" concept of accounting

it is a case of cause and effect. Rising prices produce profits and declining prices produce losses.

If you were familiar with the tanning industry as a whole and these four representative companies in particular, you would know that during these years of widely fluctuating results, the physical volume of operations has been practically constant. It happens that shoe production, which is the outlet for leather, varies relatively much less than most industries. From top to bottom of the recent depression shoe production dropped only about 15 per cent. as against 35 to 45 per cent. in many lines and even 65 to 75 per cent. in others. Of the major commodities only sugar consumption showed more stability than shoe production. Therefore, volume was not the factor which caused these differences in income.

On the other hand, these four companies were operated by established management groups throughout this period of years. If these groups were good one year, they were just about as good in the other years. If bad, they were just about as bad every year. Certainly these fluctuating results are not the reflection of any such fluctuation in managerial ability.

If this situation existed in only the tanning industry we would hardly have the temerity to claim your attention this evening. But a more or less similar picture is found in practically every industry where there are fluctuating prices and where the time element involved in procuring raw materials, in processing, and/or in distribution necessarily results in a slow inventory turnover.

Definite evidence of this situation is found in the gyrations in the stock market of the companies in the so-called "inventory" industries. Corporations which are never considered for investment, because of their poor earning record over the long pull, are hunted out and speculated in for short periods whenever a rise in commodity prices is anticipated. On the other hand, stocks in excellent, well-managed companies of the inventory group are apt to be the first to be dumped overboard when it looks as if a sharp decline in raw material prices is coming.

Effect on Dividend Policy and Practice

But all of this, in itself, is not very serious. Suppose the profit curve in companies necessarily carrying large

inventories does waver all over the map. Suppose fluctuating profits in these companies do provide ammunition for crazy movements in the stock market. Why should this concern us particularly?

It is the unfortunate reaction which results from this situation that is so disturbing and distressing and demands our attention.

Perhaps one of the most obvious difficulties confronting an inventory company showing such unstable earnings is the matter of dividends. In the first place there is the very serious problem of determining the proper amount of dividend that can be declared with any degree of regularity. But worse than this is the problem of actually paying these dividends. On a rising market a company shows large profits and distribution of earnings is naturally expected. However, the increase in prices necessitates the use of more of the company's cash in maintaining inventories unless operations are curtailed. In many companies thus affected, the only time there is any cash with which to pay dividends is when huge losses are being indicated. No wonder the treasurers of such companies grow old and gray before their time.

In many instances the result is that an insufficient amount of earnings over the long pull is distributed so that too much is available for use in plant expansion, etc. If you will check up, you will find that most of the industries suffering from excess productive facilities are those in which large inventories are involved.

The Problem of Taxes

Then there is the problem of taxes. No well-meaning, right-thinking company objects to paying its proper share of the tax burden. On the other hand, no one likes to carry more than his fair share of the load. The inventory companies, because of such wide fluctuations in earnings, are often required to pay excessive income taxes. Many companies which, in the main, have lost money, and whose surpluses have been seriously depleted, have in a certain few years of rising prices been forced to pay more income taxes than some continuously successful companies of similar size would pay over a long period, simply because of the difference in size of inventories involved. Such a situation is grossly inequitable. With the elimination of

the former loss carry-over which gave some partial relief, this situation is now intolerable.

While this inequity with regard to income taxes is a very serious matter, it is not as bad as the situation with regard to the undistributed profits surtax contained in the Revenue Act of 1936. As stated before, the company with heavy inventories is apt to require all its cash on a rising market to take care of the increased cost of its raw material purchases. Even if cash is available or some non-cash equivalent for dividends is used, no company in its right mind would want to distribute anywhere near all of its profits during such a period. Taxation of undistributed profits under such circumstances is simply confiscation of capital.

Business is undoubtedly in for more and more stringent governmental regulation and increasing taxation. Profits will, in most instances, be used as an index for such matters on the general theory of the ability to pay. Labour expects to share in profits, and probably will, either through government edict or through its own organized efforts. Some degree of socialization is probably inevitable, and business profits will be taxed directly or indirectly to help pay the bill. The proper determination of net profits is rapidly assuming an importance which makes it a life and death matter to both management and stockholders.

Psychological Reaction to Fluctuating Income On Part of Management

But perhaps the most serious, if not the most obvious, difficulty in connection with this whole matter is the psychological reaction on the part of management to such apparently fluctuating income. A big profit one year, a big loss the next. How can management plan intelligently under such circumstances? Perhaps in connection with every phase of a business there has been marked improvement. Manufacturing costs have been reduced, sales have been increased, service has been improved, personnel has been strengthened, quality has been raised, etc., etc. Yet a year of profits is followed by a year of losses simply because of drastic inventory adjustments necessitated by declining prices.

Executives and stockholders are human beings—creatures of emotion primarily. Over the years there has

been built up an increasing regard for financial statements, and particularly for the audited figures at the end of the year. Unconsciously, one of the first reactions to these figures is that they are a measure of managerial ability. Not only do the stockholders and the public feel this way, but also the executives who are involved. The effect of widely fluctuating results from year to year, such as are now prevalent in companies with large inventories, is most unfortunate. In many instances careful and capable managements are temporarily discredited and changes made in personnel which are not warranted by the real facts. On the other hand, probably in a larger number of cases, incompetent executives are unduly rewarded for apparently successful results when in reality they failed by a wide margin to realize all that should have been attained. Even when directors and stockholders are not so misled, the conscientious executive becomes disturbed and even distraught, and his judgment is impaired. He may understand the situation thoroughly and know that the indicated results do not tell the real story, but as long as he is human he cannot help but be affected.

It is in this connection that we, the proponents of a different method of accounting for profits, make our most decided claim for your consideration. Accountants as a group should spend more time and thought on improving the basic concepts of their work to the end that reported financial results may be made a truer index of actual results. We have been too prone to strive for fourth-decimal-place accuracy while we should have been more alive to the changing aspects and increasing problems of business. Robert H. Montgomery of Lybrand, Ross Bros. & Montgomery, in a recent edition of his book, *Auditing Theory and Practice,* makes the statement that accounting practices should be in conformity with successful business methods.

Historical Acceptance of "Cost or Market" Concept

If we stop to review for a moment the history of accounting, it is easy to see why the "cost or market" concept has been so readily accepted.

The earliest use of accounting was in connection with the settling of affairs when a person of importance died and an orderly disposition of his possessions had to be made. Later on accounting was used in connection with joint trad-

ing operations in the Mediterranean as a means of establishing the individual interest of all concerned at the end or close of each separate undertaking. Eventually business became established on a more permanent basis and operations assumed some semblence of continuity in contrast to being just a series of ventures, each distinct in itself. This brought up new problems. Previously the books of account were only closed at the end or close of an activity when practically a complete liquidation of affairs was effected, and a definite basis of valuation was therefore available. With business operating continuously such natural closing points and such definite valuations no longer existed. Gradually it became common practice to close the books at the end of each season or calendar year. In the absence of actual liquidation, estimates of realizable values at the moment were used. These values were based largely on personal judgment and sometimes were dictated by expediency.

As business continued to become more generally established and as bank or outside credit came into the picture, it was necessary to develop more definite concepts for these estimated realizable values. Public ownership of business further increased the need for universally acceptable standards of valuation. The lower of cost or market for valuing inventories was gradually adopted as a safe and reasonable basis for general use.

Slowly but surely over the years there has evolved a really basic change in business. Whereas in the early days a business was a relatively short-term affair which could and would be closed when the particular undertaking was finished, today a business is normally expected to persist continuously. The term "business establishment" has largely taken the place of "business venture." But accounting has still clung tenaciously to its early conceptions, and we are still using methods which are but a pernicious hangover from the days when liquidation values were of primary concern.

Inadequacy of the "Cost or Market" Basis

The utter inadequacy of "cost or market" is perhaps best brought out in the findings of William R. Donaldson as reported in the N.A.C.A. Bulletin of October 15, 1933. Mr. Donaldson distributed a questionnaire to members of the New York and Brooklyn chapters in an attempt to

obtain a "consensus of opinion on important points in pricing and treating inventories." The answers merely confirmed Mr. Donaldson's own convictions which he expressed as follows: "In the writer's fourteen years of practice as a public accountant he has reviewed hundreds of inventories in many and varied industries and has found that the concepts of "cost" and of "market" actually employed are widely diverse—so much so that thousands, even millions of dollars, higher or lower, would result in using one concept as against another. Practices followed in one enterprise in an industry are quite dissimilar to those of another enterprise in the same industry. Each contends that its concept of pricing is correct and the other wrong. Some companies are decidedly conservative and keep values as low as they dare, deducting reserves against inventory for all sorts of contingencies; others lean toward liberal, almost inflated, valuations. Yet each company can with logic defend its prices as representing "cost" and "market." Public accountants have become used to this situation and recognize that a wide zone exists in which prices may swing and still be acceptable as proper in stating that inventories are "at cost or market, whichever is lower."

Increasing Importance of Operating Results

Today the proper conservation or stewardship of invested capital is largely taken for granted and attention is focussed instead upon operating results. The regular and continuous earning capacity of a business is now of more real interest than its net worth. Check up almost any investment manual on either stocks or bonds and see how much space is given to earning records and earning prospects in comparison with that given to reporting tangible assets.

Management today must of necessity be as much concerned with the potential possibilities for the future of a business as it is with the results of current operations. A really healthy business is one that can continuously plan ahead with real assurance. Such assurance can exist only when all inherent difficulties have been adequately and realistically discounted in advance—discounted not in the back of somebody's head perhaps, but actually discounted in the official financial statements of the company.

Among the difficulties which should be so discounted

is the inevitable decline of inventory values if they don't happen at the moment to be at bedrock levels. Right now, in the spring of 1937, such shrinkage of values may not seem very imminent, and it is quite possible that such declines won't occur for several years. So it seemed in 1926, 1927 and 1928, but in 1931 and 1932 inventory values had not only shrunk—they were positively shriveled. Except for the effect of devaluation, these low prices will be experienced again and again and again.

Each time these low prices reoccur the companies with large working inventories will show tremendous losses. They cannot escape them. Even if price declines are accurately anticipated, there is nothing that can be done about it except to drastically curtail operations, which in many instances would be suicidal. Even if such curtailment in operations could be made without upsetting customer relations or crippling established sales markets too much, it is expecting a good deal of executives to take such a step at just the time when demand for goods is the most insistent and profits are apparently the most satisfactory. History will continue to repeat itself and losses will be sustained. If large surpluses have been created in advance, they will be depleted. If earnings have been distributed, equally large deficits will result, provided the companies affected can stand them.

Why not face the real facts and discount these unescapable losses on our financial statements right now, and then keep them so discounted on every statement issued in the future?

Possible Effect on Whole Business Economy of Suggested Method

In a nut shell that is all we ask. The particular accounting technique to be used is not so important. The main thing is to be thoroughly convinced that this concept of discounting inherent potential inventory losses at all times in our financial statements is not only sound common sense but plain, forthright honesty. Once you get this feeling in your bones you will never want to issue reports again based on "cost or market," because to do so is to mislead management, stockholders, the banks and the public.

I shall not ask you to go further with me than this as far as the philosophy of inventory valuation and business

profits is concerned, but if your imagination is not too moribund, it is easy enough to see where the general acceptance of this concept might have a very definite corrective effect on our whole business economy. The intensity of our repetitive booms and depressions might be lessened, and business might even become such a stabilized social institution that within it would be found that social security for every one which is so desirable and so much needed in this old world of ours. But I suppose we must be practical and stick to business and leave the idea of achieving a better society to the long-haired zealots and the politicians.

Inventories Consist of Two Parts—Normal and Speculative

Before considering the accounting *modus operandi* of stabilizing inventory valuations, we must consider for a moment the two parts or elements found in almost every inventory situation. I am referring to the normal stock, which is essential to ordinary normal operations, and to the speculative part, the purpose of which is entirely different.

In any company there is some more or less definite quantity of working inventory which can be considered as normal or average based upon the facts of past experience, manufacturing and marketing facilities, established position in the industry, legitimate share of the business available, ability of the management, working capital including regular credit lines, etc. These normal inventories are what must be maintained practically at all times, regardless of market fluctuations, if the individual company is to maintain its standing or position in the industry. Collectively these normal inventories represent a basic stock in trade for the industry, which is essential to the proper fulfillment of that industry's function in business and society. Furthermore, these normal inventories in the aggregate represent the basic quantity which at regular rates of turnover should provide, through the economic profit margin thereon, an adequate return for the capital invested.

Inventories in excess of or less than these normal quantities, introduce the element of speculation. Long positions are entered into to make extra profits and short positions for the purpose of saving costs to gain the same end. Speculation is usually for short periods, and more or less complete withdrawal from a speculative position is possible at any time in anticipation of a change in price. Therefore, there is not the same need for discounting possible losses in con-

nection with speculative inventories that there is for normal inventories which have to be maintained at all times regardless of price fluctuations.

Speculative inventories should, however, be segregated on the balance sheet. Normal inventories are, to all intents and purposes, a fixed asset and properly should be carried as such. Normal inventories are not current assets since they are not available for conversion into cash at any time unless normal operations are to be curtailed. A speculative position on the long side can be liquidated if necessary, and such inventories are properly, therefore, a current asset. A short position, unless working capital has been impaired, will be offset by the equivalent cash which has not been used and should, therefore, be indicated as a reserve against current assets.

Segregating the Two Elements

But first we must segregate these two elements. Speculation is seldom a matter of specific purchases and sales. It is the taking of a long or short position resulting from a feeling of optimism or pessimism on the part of the management. Speculation starts when purchases are first expanded or contracted in any way which results in the total quantity of inventory becoming more or less than normal. Speculation continues as long as more or less than normal inventories are carried, and ends when such purchases are made as will result in a normal quantity again. Thus at any given time speculative inventories, either plus or minus, are completely merged with normal inventories and cannot be specifically segregated. Therefore, the physical measure of inventory speculation is the quantity by which the total inventory on hand is more or less than normal. Expressed in dollars and cents, this speculation equals this difference in quantity, plus or minus, extended at the average unit cost of the total inventory.

Now that we have segregated our total inventory value into these two parts, we can easily reduce the normal inventory to a value which discounts any possible future losses while leaving the speculative inventory at cost. The loss resulting from reducing the normal inventory to a permanent base price, is a capital adjustment and should be charged to surplus in the same way that any other capital inflation would be handled. This adjustment represents

profits which have been reported but which are not real because they are not permanently owned, since they must be given up in the form of losses on the next price decline. If you insist on "having your cake and eating it too," you may set this up as a deferred charge and write it off later as necessary. This will not disturb the surplus account and yet the working capital accounts will be deflated to the point where excessive dividends cannot be distributed without full knowledge of what is being done.

By keeping the normal inventory constantly at this reduced or basic value, current sales will be costed with current purchases and the loss or gain from normal operations will always be the quantity of goods sold multiplied by the profit margin existing at the moment between selling and raw material prices. The loss or gain from speculation will be picked up currently in profit and loss as speculation is consummated.

"The Normal Inventory Reserve Method of Inventory Operation"

This may be a little clearer if we take up the actual mechanics of a plan which works along this line and then analyze the results obtained in connection with a particular given set of conditions by applying this plan and several others including "cost or market." The particular plan which I am going to describe I shall call, for lack of a better name, the "Normal Inventory (or Stock) Reserve Method of Inventory Accounting."

I have prepared, as shown on the exhibit entitled "Hypothetical Set of Inventory Operations," the figures for a complete cycle of operations which it is assumed repeats itself indefinitely. Sales each period are uniform in quantity and are always above current costs. Speculation, both long and short, is carried on at a profit. Since we end up in this cycle at exactly where we started as far as prices and inventory quantities are concerned, and since the prospects for the future are also the same, the net profit is undeniably the difference between sales and purchases. The conditions portrayed on this exhibit are perhaps absurdly simple and idealistic, but they are a complete whole and provide a real proving ground on which to test out any method we may care to consider.

Balance Sheet Display

The exhibit entitled "Establishing and Carrying Out

Normal Inventory Reserve Method" shows in the first balance sheet how we would probably find the opening conditions on the books of many companies at the end of the previous cycle, but before the auditors had arrived. The only difference is that we have segregated the speculative and normal inventories. Obviously the inventories must be reduced. The auditors will insist on "cost or market" to eliminate this inflation. Instead we will stick to our new concept of valuations and reduce the normal inventory to a base price with the result as shown in the second balance sheet. The auditors may wonder what it's all about and insist on putting all of the inventory under current assets, but they cannot criticise our final figures. To save argument we will wait until the auditors have signed our statement and gone home before we go any further. However, before we start accounting for current operations in the new cycle, we will make one simple little change in our accounts and without disturbing surplus we will indicate these opening conditions according to the third balance sheet.

This set-up may seem a little strange, but the procedure followed in arriving at it is entirely logical. We may have to go through the explanations a few times to convince ourselves that it isn't just hocus-pocus, but I am confident that we all come to the same conclusion, namely, that this last balance sheet properly sets forth the conditions as they exist.

The procedure as outlined will give us successive balance sheets at the end of each period, all of which will reflect the same fundamental concept of inventory valuation. The balance sheet at the end will be the same as the one at the beginning except that our net worth has, as it should, increased by the difference between sales and purchases and our cash position is improved by exactly the same amount. This is all shown in detail on the exhibit entitled "Normal Stock Reserve Method." The accumulated profit and loss curve graphically representing these results is shown as No. 9 on the final chart.

Effect on Reported Earnings

We find that a reasonable profit is shown for each month and that at no time is there an accumulated profit in excess of that at the end. For no period is there shown a loss in spite of the fluctuations in market values as shown in the curve of raw material prices.

If we carefully study this set of operations, it is obvious that the management consistently did a good job. They always obtained a profit over current replacement in their sales. They speculated about as nearly perfectly as any one could.

If we didn't know anything about accounting traditions, I am sure we would all say that the results obtained under this new procedure were quite representative of what was really accomplished and therefore a fairly true measure of the managerial ability displayed. At no time could the management become unduly elated by unfortunate illusions of grandeur, or be subject to unfair or unwarranted criticism. What ideal conditions for management to work under!

Let's Look at the Figures

If we still are in doubt let us look back at the detail figures and see if our results are really sound. In the first place, please note the cash situation. At the end of each successive period we have arbitrarily set aside for dividend purposes an amount of cash equal to the net profit for that period. At the beginning of operations the speculative inventory at cost was financed by bank loans or, to put it the other way around, the bank loans were secured by the speculative inventory at cost. Please note that at the end of each period where there are bank loans, they are similarly secured one hundred per cent. by speculative inventories at cost which could be liquidated if desired without crippling the business. It is true that at times these speculative inventories are above market. However, with the degree of conservatism existing in the normal inventory, there is always adequate protection on the whole for the banks even if the cash which has been earmarked for dividends were all so distributed. On the other hand, whenever a short position in inventories is taken, the exact amount of cash which was not used in keeping inventories at normal is free and clear in the bank, ready for increased purchases whenever prices are attractive. Finally our auditors cannot object, for at all times our total inventories are well below either cost or market no matter how these might be figured. The amounts by which our closing inventories at certain times are below the lower of cost or market is perhaps rather startling. A little thought, however, will show that in the last analysis these amounts

really represent just how far from being really safe and truly conservative we would have been, if we had stuck to the traditional methods of accounting.

Comparison with Other Methods

Now let us see just how preferable these results under the "normal inventory reserve" method are to what we should have otherwise obtained. The remaining two exhibits entitled "Comparison of Inventory Accounts Under Certain Various Accounting Methods" and "Comparison of Net Profit and Loss Accounts Under Certain Various Accounting Methods" have been prepared for this purpose. The basis of each different method is shown underneath the profit and loss figures. The various accumulated profits by periods are shown graphically on the chart exhibit previously referred to.

The "Last-In, First-Out" Method

Perhaps the only explanation needed, in addition to that given on the exhibits, is a word in connection with what I have called a literal interpretation of the "last-in, first-out" method which is now receiving considerable attention, particularly since it has been adopted by the petroleum industry. When you first hear about this method it seems very simple. In closing your books at any time you simply back up on your purchases, starting with the most recent, and when a quantity equivalent to sales has been reached, that is your cost of sales. However, it is not nearly so simple as that if the true result is to be obtained. You either have to take your opening inventory and use it forever after as a reservoir from which, at the unit values existing when you started, you borrow and to which you pay back differences in quantity between current sales and purchases; or you have to figure the first period, and then the first and second together as a single period, and then the first, second and third together, and so on interminably with the differences between these successive totals giving the results for individual periods. Of course, what is actually done in most instances where this method is used, is that these figures are taken for interim reports, and then some figure adjusted by expediency is used at the end of the year and a fresh start taken for the next year. Not very clear cut or definite at best.

No reference is made to any of the various so-called

"base stock" methods of which the one used so enthusiastically for many years by the National Lead Company has received the most attention. These methods all give practically the same results as the "normal inventory reserve" method, but since their routine mechanics of operation are based on more or less arbitrarily established procedures and not on a simple, straightforward logical concept, they seem to me to be less desirable. Furthermore, at times the journal entries become quite involved and hard to follow. These methods should not be ignored, however, as they have proved to be of great value to the companies using them.

Use of Inventory Reserves

Just a word should also be said about the companies like Swift, the large packers, who operate their accounts in the traditional manner and then at the end of the year, upon a vote of the directors, set up inventory reserves to more or less completely discount any inherent future losses. Statistical side records are kept, somewhat along the lines of the normal stock idea, to establish the proper amounts to be used in setting up these reserves. If faithfully and conscientiously adhered to this plan will give the proper results at least as far as the annual statements are concerned. Interim statements may be misleading and there is always the danger that at certain times expediency may dictate as to whether the reserves shall be really adequate.

Why Not Inventory Hedging?

It will probably occur to some of you that inventory hedging would eliminate the fluctuations in income due to price changes and that therefore hedging is the right answer to our problem. The fact that in a few industries almost complete hedging has been continuously carried on for many years by the successful companies for just this purpose is excellent evidence of the desirability of rationalizing profits by eliminating the inventory gains and losses. The social and economic benefits resulting from a stabilized and reasonable price for a loaf of bread cannot be denied. Such benefits could not have been enjoyed if the large milling companies had not adopted some such procedure. However, successful hedging requires a knowledge of how to hedge and also an established commodity futures market where real hedging can be carried on. Very few executives know how to hedge and there are a great many industries

where no such futures market exists. It costs money to carry hedging accounts. It would seem that it would be better to stabilize indicated profits by stabilizing inventory valuations. For a great majority of the inventory companies the accounting approach apparently offers the only hope of improvement.

If the comparative profit curves shown on the chart exhibit do not show conclusively the disadvantages of the "cost or market" basis of accounting and the great advantages of some stabilized basis such as the "normal inventory reserve" method, then nothing that might be added to these remarks would be of much avail.

We have established our problem, considered it from various pertinent angles, and offered a solution. All that remains is for you individually to think the matter through and then draw your own conclusions. All that we ask is that you forget for a moment your inhibitions and your prescribed accustomed ways of thinking, and then with an open mind see if this isn't something that merits your further study and analysis.

We trust that, by the time you may decide to change the accounting procedure in your own companies, the Treasury Department will have modified its regulations so that you will be permitted to report the same profits for tax purposes that you feel you must furnish your executives and stockholders.

ESTABLISHING AND CARRYING OUT NORMAL INVENTORY RESERVE METHOD

Opening inventory on an actual cost basis—first in, first out—figures to be $196.00 for a quantity of 1,500 at an average unit value of $0.13067. Taking 1,200 as a normal stock and 300 as speculative, and assuming that the speculative quantity is financed by bank loans, then the opening condition is reflected as follows:

BALANCE SHEET

Current Assets		*Current Liabilities*	
Inventories		Bank Loans	$ 39.20
1,200 @ $0.13067	$156.80		
300 @ 0.13067	39.20	*Net Worth*	
		Balance	156.80
	$196.00		$196.00

The market value of inventories is $150.00 or $46.00 less than cost. By writing the normal stock down to $0.09 the entire inventory is reduced by $48.80 leaving a net valuation of $147.20 which is slightly below market. The unit value of $0.09 for the normal stock is slightly below the low point in the market price cycle and can be used as a conservative all-time base price. Since the normal quantity and the base price are unchanging this normal inventory item may be carried

as a fixed asset, without further entries thereto, and only the speculative quantity at average cost considered as a current asset or as a part of currently available working capital. Giving effect to these adjustments conditions are then reflected as follows:

BALANCE SHEET

Current Assets		*Current Liabilities*	
Speculative Inventory		Bank Loans	$ 39.20
300 @ $0.13067	$ 39.20		
Fixed Assets		*Net Worth*	
Normal Inventory		Balance	108.00
1,200 @ $0.09	108.00		
	$147.20		$147.20

Since the speculative quantity is at all times the difference between the total quantity and the normal quantity, then the speculative inventory in this last balance sheet can be expressed as the difference between a debit account for the total quantity at average cost and a credit account or inventory reserve for the normal quantity at the same average cost. Conditions are then shown as follows:

BALANCE SHEET

Current Assets		*Current Liabilities*	
Total Inventory at Cost		Bank Loans	$ 39.20
1,500 @ $0.13067	$196.00		
Less Normal Inv. Reserve		*Net Worth*	
1,200 @ $0.13067	156.80	Balance	108.00
Net Speculative Inv. ...	$ 39.20		
Fixed Assets			
Normal Inventory			
1,200 @ $0.09	$108.00		
	$147.20		$147.20

After establishing this set-up, current operations each period are accounted for as follows:

A—Charge all purchases at actual cost to "Total Inventory at Cost."

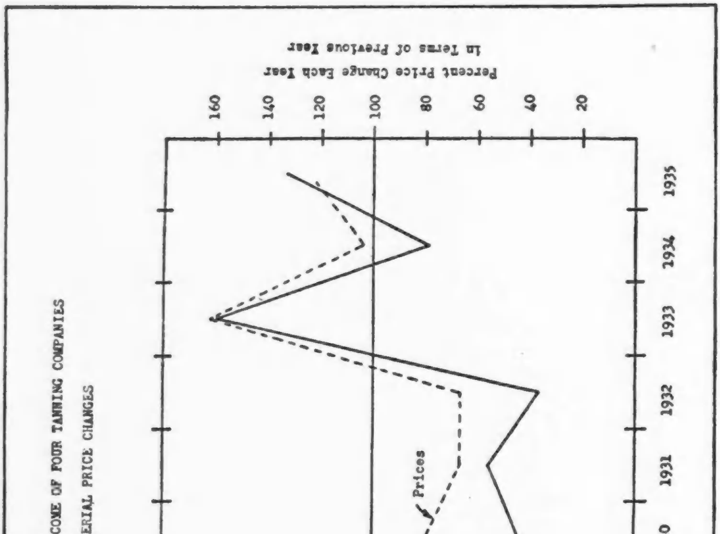
B—Credit out Cost of Sales at actual cost on a first-in, first-out basis from "Total Inventory at Cost."

C—Calculate new average unit value of "Total Inventory at Cost."

D—Adjust "Normal Inventory Reserve" so as to have the same average unit value as "Total Inventory at Cost," and clear this adjustment to Profit and Loss either as a part of Cost of Sales or as a separate item called Normal Inventory Reserve Adjustment.

Inasmuch as the adjustment of "Normal Inventory Reserve" is entirely a matter of price this can be accomplished by keeping this account in step with some representative market price index after making due allowance for the approximate average age of the inventories on hand.

Whenever there is no speculation and total quantity of inventories on hand is normal, then "Total Inventory at Cost" and "Normal Inventory Reserve" will exactly offset at each closing, and current cost of sales plus reserve adjustment will equal cost of current purchases with net operating profits equalling the margin of sales over replacement.


COMPARISON OF YEARLY INCOME OF FOUR TANNING COMPANIES
WITH RAW MATERIAL PRICE CHANGES
Percent Price Change Each Year
in Terms of Previous Year
Millions of Dollars
Profits
Losses
P & L
Prices
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935

HYPOTHETICAL SET OF INVENTORY OPERATIONS INVOLVING BOTH MARKET FLUCTUATIONS AND SPECULATION

	Quantities on Hand		Raw Stock Market		Purchases			Sales			Closing Inventory Values[1]			
													Lower of Cost or Market	
Period	Opening	Close	Opening	Close	Quantity	@	Amount	Quantity	@	Amount	Market	Cost First In-First Out	Merch. Acct.[2]	Double Entry[3]
1	1,500	1,525	$0.10	$0.13	400	$0.12	$48.00	375	$0.13	$48.75	$198.25	$189.50	$189.50	$160.50
2	1,525	1,450	0.13	0.15	300	0.14	42.00	375	0.15	56.25	217.50	180.00	180.00	165.00
3	1,450	1,275	0.15	0.17	200	0.16	32.00	375	0.17	63.75	216.75	167.00	167.00	159.50
4	1,275	1,000	0.17	0.20	100	0.18	18.00	375	0.19	71.25	200.00	140.00	140.00	140.00
5	1,000	825	0.20	0.17	200	0.18	36.00	375	0.19	71.25	140.25	131.00	131.00	131.00
6	825	850	0.17	0.15	400	0.16	64.00	375	0.17	63.75	127.50	142.00	127.50	127.50
7	850	1,075	0.15	0.13	600	0.14	84.00	375	0.15	56.25	139.75	161.50	139.75	139.75
8	1,075	1,500	0.13	0.10	800	0.12	96.00	375	0.13	48.75	150.00	196.00	150.00	150.00
		Totals for 8 Periods			3,000	0.14	420.00	3,000	0.16	480.00				
		Net profit for 8 Periods equals					480.00 less	420.00	or 60.00					

[1] In each case the inventory at opening of 1st Period is the same as at close of 8th Period.

[2] Merchandise Account Method—value of remaining inventory at lower of actual cost or market and cost-of-sales determined accordingly.

[3] Double Entry Cost Method—inventory adjusted to market whenever lower than book value and then carried at such adjusted values until worked out on a first-in, first-out basis.

It is assumed that these operations represent a complete cycle which is repeated indefinitely. Thus any accounting system used must produce the same inventory value at the end as at the beginning and show an accumulated net profit for 8 periods of $60.00.

These operations cover a uniform volume of sales at a fixed differential over replacement and a profitable speculative buying policy. The net accumulated profit of $60.00 is the result of $30.00 profit from sales above replacement and $30.00 profit from speculation.

These operations, while admittedly ideal and hypothetical, have been developed to illustrate the problems involved in those industries where widely fluctuating price levels prevail and where the time element resulting from remote sources of raw materials, manufacturing processes and/or distribution methods cannot help but cause a relatively slow inventory turnover.

NORMAL STOCK RESERVE METHOD

Period	Quantities	(1) Total Inv. at Cost @		(2) Normal Inv. Reserve @		(3) Net Speculative Inv. Quantity	@	Amount	(4) Normal Inv. 1200 @ $0.09	(5) Total Inventories		(6) Net Cash and Loans Operations		(7) Dividends (Distributable)		(8) Total	(9) @		Profit and Loss Costs		(10) Reserve Adj. @	(11)	Net
Opening	1,500	$0.13067	$196.00	$0.13067	—156.80	300	$0.13067	$39.20	$108.00	$147.20		—$39.20		000	Bal.	—$39.20							
1 Purchases	400	0.12(a)	48.00								(a)	—48.00					$0.13	(b)	$48.75			Sales	
	1,900		244.00								(b)	48.75						(c)	—54.50			C. of S.	
Cost of Sales	—375	(c)	—54.50	0.00641(d)	7.69						(e)	—1.94	(e)	1.94					—5.75	(d)	$7.69	Net	$1.94
Closing	1,525	0.12426	189.50	0.12426	—149.11	325	0.12426	40.39	108.00	148.39		—40.39		1.94	Bal.	—38.45			—5.75		7.69	Acc.	1.94
2 Purchases	300	0.14(a)	42.00								(a)	—42.00					0.15	(b)	56.25			Sales	
	1,825		231.50								(b)	56.25						(c)	—51.50			C. of S.	
Cost of Sales	—375	(c)	—51.50	0.00012(d)	0.14						(e)	—4.89	(e)	4.89					4.75	(d)	0.14	Net	4.89
Closing	1,450	0.12414	180.00	0.12414	—148.97	250	0.12414	31.03	108.00	139.03		—31.03		6.83	Bal.	—24.20			—1.00		7.83	Acc.	6.83
3 Purchases	200	0.16(a)	32.00								(a)	—32.00					0.17	(b)	63.75			Sales	
	1,650		212.00								(b)	63.75						(c)	—45.00			C. of S.	
Cost of Sales	—375	(c)	—45.00	0.00689(d)	—8.21						(e)	—10.54	(e)	10.54					18.75	(d)	—8.21	Net	10.54
Closing	1,275	0.13098	167.00	0.13098	—157.18	75	0.13098	9.82	108.00	117.82		—9.82		17.37	Bal.	7.55			17.75		—0.38	Acc.	17.37
4 Purchases	100	0.18(a)	18.00								(a)	—18.00					0.19	(b)	71.25			Sales	
	1,375		185.00								(b)	71.25						(c)	—45.00			C. of S.	
Cost of Sales	—375	(c)	—45.00	0.00902(d)	—10.82						(e)	—15.43	(e)	15.43					26.25	(d)	—10.82	Net	15.43
Closing	1,000	0.14000	140.00	0.14000	—168.00	—200	0.14000	—28.00	108.00	80.00		28.00		32.80	Bal.	60.80			44.00		—11.20	Acc.	32.80
5 Purchases	200	0.18(a)	36.00								(a)	—36.00					0.19	(b)	71.25			Sales	
	1,200		176.00								(b)	71.25						(c)	—45.00			C. of S.	
Cost of Sales	—375	(c)	—45.00	0.01879(d)	—22.55						(e)	—3.70	(e)	3.70					26.25	(d)	—22.55	Net	3.70
Closing	825	0.15879	131.00	0.15879	—190.55	—375	0.15879	—59.55	108.00	48.45		59.55		36.50	Bal.	96.05			70.25		—33.75	Acc.	36.50
6 Purchases	400	0.16(a)	64.00								(a)	—64.00					0.17	(b)	63.75			Sales	
	1,225		195.00								(b)	63.75						(c)	—53.00			C. of S.	
Cost of Sales	—375	(c)	—53.00	0.00827(d)	—9.92						(e)	—0.83	(e)	0.83					10.75	(d)	—9.92	Net	0.83
Closing	850	0.16706	142.00	0.16706	—200.47	—350	0.16706	—58.47	108.00	49.53		58.47		37.33	Bal.	95.80			81.00		—43.67	Acc.	37.33
7 Purchases	600	0.14(a)	84.00								(a)	—84.00					0.15	(b)	56.25			Sales	
	1,450		226.00								(b)	56.25						(c)	—64.50			C. of S.	
Cost of Sales	—375	(c)	—64.50	0.01683(d)	20.20						(e)	—11.95	(e)	11.95					—8.25	(d)	20.20	Net	11.95
Closing	1,075	0.15023	161.50	0.15023	—180.27	—125	0.15023	—18.77	108.00	89.23		18.77		49.28	Bal.	68.05			72.75		—23.47	Acc.	49.28
8 Purchases	800	.12(a)	96.00								(a)	—96.00					0.13	(b)	48.75			Sales	
	1,875		257.50								(b)	48.75						(c)	—61.50			C. of S.	
Cost of Sales	—375	(c)	—61.50	0.01956(d)	23.47						(e)	—10.72	(e)	10.72					—12.75	(d)	23.47	Net	10.72
Closing	1,500	0.13067	196.00	0.13067	—156.80	300	0.13067	39.20	108.00	147.20		—39.20		60.00	Bal.	20.80			60.00		000	Acc.	60.00

Perodic Journal Entries

- a Recording Purchases. Dr. Total Inventory at Cost. Cr. Cash or Loans for Operations.
- b Recording Sales. Dr. Cash or Loans for Operations. Cr. Profit and Loss on Costs.
- c Entering Cost-of-Sales. Dr. Profit and Loss on Costs. Cr. Total Inventory at Cost. Figured at actual cost—first in, first out.
- d Adjustment of Normal Inventory Reserve. Dr. or Cr. Normal Inventory Reserve. Cr. or Dr. Profit and Loss from Reserve Adjustment. Figured by multiplying normal quantity (1200) by plus or minus difference between average unit values of Total Inventory at cost at beginning and end of period, always taking opening average first and subtracting closing average from it.
- e Establishing Distributable Profits. Dr. or Cr. Cash Available for Dividends. Cr. or Dr. Cash or Loans for Operations. Amount equal to net gain or loss for period.

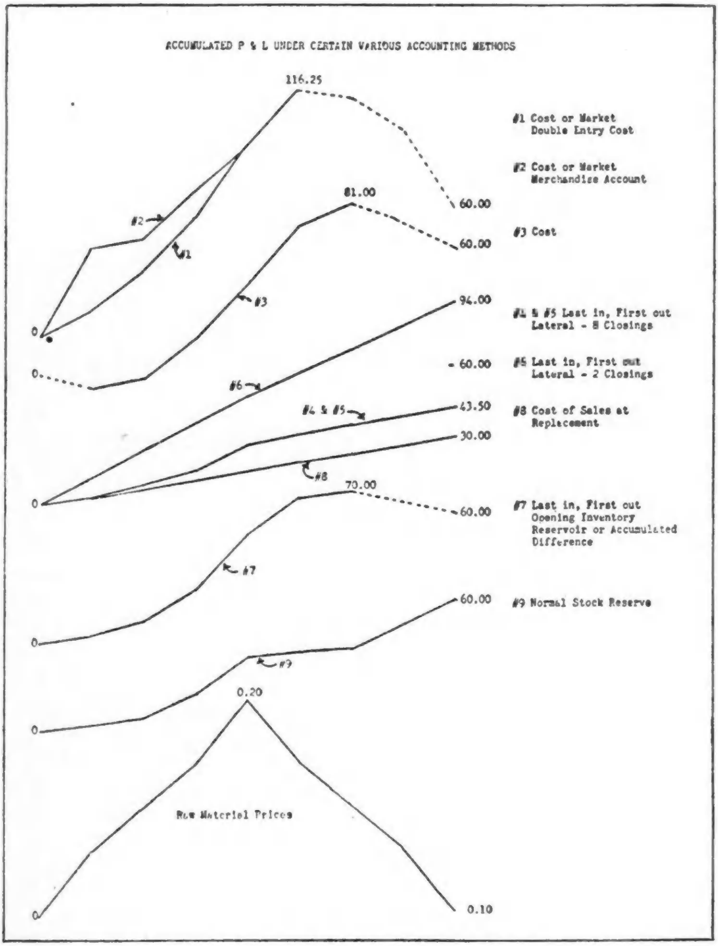
COMPARISON OF INVENTORY ACCOUNTS
UNDER CERTAIN VARIOUS ACCOUNTING METHODS

Period		Quantities	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9 Cost	No. 9 Adj.	Total
	Opening	1,500	$150.00	$150.00	$196.00	$150.00	$196.00	$150.00	$150.00	$150.00	.....	.....	$147.20
1	Purchases	400	48.00	48.00	48.00	48.00	48.00	.....	48.00	48.00	.....	.....	48.00
		1,900	198.00	198.00	244.00	198.00	244.00	.....	198.00	198.00	.....	.....	195.20
	Cost of Sales..	—375	—37.50	—8.50	—54.50	—45.00	—45.00	.....	—45.00	—45.00	—$54.50	$7.69	—46.81
	Closing	1,525	160.50	189.50	189.50	153.00	199.00	.....	153.00	153.00	.....	.....	148.39
2	Purchases	300	42.00	42.00	42.00	42.00	42.00	.....	42.00	42.00	.....	.....	42.00
		1,825	202.50	231.50	231.50	195.00	241.00	.....	195.00	195.00	.....	.....	190.39
	Cost of Sales..	—375	—37.50	—51.50	—51.50	—51.00	—51.00	.....	—50.00	—52.50	—51.50	0.14	—51.36
	Closing	1,450	165.00	180.00	180.00	144.00	190.00	.....	145.00	142.50	.....	.....	139.03
3	Purchases	200	32.00	32.00	32.00	32.00	32.00	.....	32.00	32.00	.....	.....	32.00
		1,650	197.00	212.00	212.00	176.00	222.00	.....	177.00	174.50	.....	.....	171.03
	Cost of Sales..	—375	—37.50	—45.00	—45.00	—56.50	—56.50	.....	—49.50	—60.00	—45.00	—8.21	—53.21
	Closing	1,275	159.50	167.00	167.00	119.50	165.50	.....	127.50	114.50	.....	.....	117.82
4	Purchases	100	18.00	18.00	18.00	18.00	18.00	140.00	18.00	18.00	.....	.....	18.00
		1,375	177.50	185.00	185.00	137.50	183.50	290.00	145.50	132.50	.....	.....	135.82
	Cost of Sales..	—375	—37.50	—45.00	—45.00	—60.50	—60.50	—190.00	—45.50	—67.50	—45.00	—10.82	—55.82
	Closing	1,000	140.00	140.00	140.00	77.00	123.00	100.00	100.00	65.00	.....	.....	80.00
5	Purchases	200	36.00	36.00	36.00	36.00	36.00	.....	36.00	36.00	.....	.....	36.00
		1,200	176.00	176.00	176.00	113.00	159.00	.....	136.00	101.00	.....	.....	116.00
	Cost of Sales..	—375	—45.00	—45.00	—45.00	—66.00	—66.00	.....	—53.50	—67.50	—45.00	—22.55	—67.55
	Closing	825	131.00	131.00	131.00	47.00	93.00	.....	82.50	33.50	.....	.....	48.45
6	Purchases	400	64.00	64.00	64.00	64.00	64.00	.....	64.00	64.00	....	.....	64.00
		1,225	195.00	195.00	195.00	111.00	157.00	.....	146.50	97.50	.....	.....	112.45
	Cost of Sales..	—375	—53.00	—67.50	—53.00	—60.00	—60.00	.....	—61.50	—60.00	—53.00	—9.92	—62.92
		.....	142.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Write down ...	.....	—14.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Closing	850	127.50	127.50	142.00	51.00	97.00	.....	85.00	37.50	.....	.....	49.53
7	Purchases	600	84.00	84.00	84.00	84.00	84.00	.....	84.00	84.00	.....	.....	84.00
		1,450	211.50	211.50	226.00	135.00	181.00	.....	169.00	121.50	.....	.....	133.53
	Cost of Sales..	—375	—56.25	—71.75	—64.50	—52.50	—52.50	.....	—61.50	—52.50	—64.50	+20.20	—44.30
		.....	155.25	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
	Write down ..	.....	—15.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Closing	1,075	139.75	139.75	161.50	82.50	128.50	.....	107.50	69.00	.....	.....	89.23
8	Purchases	800	96.00	96.00	96.00	96.00	96.00	280.00	96.00	96.00	.....	.....	96.00
		1,875	235.75	235.75	257.50	178.50	224.50	380.00	203.50	165.00	.....	.....	185.23
	Cost of Sales..	—375	—48.75	—85.75	—61.50	—45.00	—45.00	—196.00	—53.50	—45.00	—61.50	+23.47	—38.03
		.....	187.00	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
	Write down ..	.....	—37.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Closing	1,500	150.00	150.00	196.00	133.50	179.50	184.00	150.00	120.00	.....	.....	147.20

COMPARISON OF NET PROFIT AND LOSS ACCOUNTS UNDER CERTAIN VARIOUS ACCOUNTING METHODS

Period		Sales Quantity	@	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9 Cost	No. 9 Adj.	Total
1	Sales	375	$0.13	$48.75	$48.75	$48.75	$48.75	$48.75	.....	$48.75	$48.75	.....	.....	$48.75
	Cost of Sales	..	...	—37.50	—8.50	—54.50	—45.00	—45.00	.....	—45.00	—45.00	—54.50	7.69	—46.81
	Current P. & L.	...	...	11.25	40.25	— 5.75	3.75	3.75	.....	3.75	3.75	.....	.....	1.94
2	Sales	375	0.15	56.25	56.25	56.25	56.25	56.25	.....	56.25	56.25	.....	.....	56.25
	Cost of Sales	...	...	—37.50	—51.50	—51.50	—51.00	—51.00	.....	—50.00	—52.50	—51.50	0.14	—51.36
	Current P. & L.	...	...	18.75	4.75	4.75	5.25	5.25	.....	6.25	3.75	.....	.....	4.89
	Accumulated P. & L.	...	...	30.00	45.00	— 1.00	9.00	9.00	.....	10.00	7.50	.....	.....	6.83
3	Sales	375	0.17	63.75	63.75	63.75	63.75	63.75	.....	63.75	63.75	.....	.....	63.75
	Cost of Sales	...	..	—37.50	—45.00	—45.00	—56.50	—56.50	.....	—49.50	—60.00	—45.00	— 8.21	—53.21
	Current P. & L.	...	...	26.25	18.75	18.75	7.25	7.25	.....	14.25	3.75	.....	.....	10.54
	Accumulated P. & L.	...	...	56.25	63.75	17.75	16.25	16.25	.....	24.25	11.25	.....	.....	17.37
4	Sales	375	0.19	71.25	71.25	71.25	71.25	71.25	240.00	71.25	71.25	.....	.....	71.25
	Cost of Sales	...	...	—37.50	—45.00	—45.00	—60.50	—60.50	—190.00	—45.50	—67.50	—45.00	—10.82	—55.82
	Current P. & L.	...	...	33.75	26.25	26.25	10.75	10.75	50.00	25.75	3.75	.....	.....	15.43
	Accumulated P. & L.	...	...	90.00	90.00	44.00	27.00	27.00	50.00	50.00	15.00	.....	.....	32.80
5	Sales	375	0.19	71.25	71.25	71.25	71.25	71.25	.....	71.25	71.25	.....	.....	71.25
	Cost of Sales	...	...	—45.00	—45.00	—45.00	—66.00	—66.00	.....	—53.50	—67.50	—45.00	—22.55	—67.55
	Current P. & L.	...	...	26.25	26.25	26.25	5.25	5.25	.....	17.75	3.75	.....	.....	3.70
	Accumulated P. & L.	...	...	116.25	116.25	70.25	32.25	32.25	.....	67.75	18.75	.....	.....	36.50
6	Sales	375	0.17	63.75	63.75	63.75	63.75	63.75	.....	63.75	63.75	.....	.....	63.75
	Cost of Sales	...	...	—53.00	—67.50	—53.00	—60.00	—60.00	.....	—61.50	—60.00	—53.00	— 9.92	—62.92
	Write down	...	...	—14.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Current P. & L.	...	...	—3.75	—3.75	10.75	3.75	3.75	.....	2.25	3.75	.....	.....	0.83
	Accumulated P. & L.	...	...	112.50	112.50	81.00	36.00	36.00	.....	70.00	22.50	.....	.....	37.33
7	Sales	375	0.15	56.25	56.25	56.25	56.25	56.25	.....	56.25	56.25	.....	.....	56.25
	Cost of Sales	...	...	—56.25	—71.75	—64.50	—52.50	—52.50	.....	—61.50	—52.50	—64.50	20.20	—44.30
	Write down	...	..	—15.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Current P. & L.	...	...	—15.50	—15.50	— 8.25	3.75	3.75	.....	— 5.25	3.75	.....	.....	11.95
	Accumulated P. & L.	...	...	97.00	97.00	72.75	39.75	39.75	.....	64.75	26.25	.....	.....	49.28
8	Sales	375	0.13	48.75	48.75	48.75	48.75	48.75	240.00	48.75	48.75	.....	.....	48.75
	Cost of Sales	...	...	—48.75	—85.75	—61.50	—45.00	—45.00	—196.00	—53.50	—45.00	—61.50	23.47	—38.03
	Write down	...	...	—37.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Current P. & L.	...	...	—37.00	—37.00	—12.75	3.75	3.75	44.00	— 4.75	3.75	.....	.....	10.72
	Accumulated P. & L.	...	...	60.00	60.00	60.00	43.50	43.50	94.00	60.00	30.00	.....	.....	60.00

No. 1 Closing Inventory at Lower of Cost or Market—Double Entry Cost Method.
2 Closing Inventory at Lower of Cost or Market—Merchandise Account Method.
3 Closing Inventory at Cost—First In, First Out.
4 Last In, First Out—Literal Interpretation—Eight Closings—Starting with Market.
5 Last In, First Out—Literal Interpretation—Eight Closings—Starting with Cost.
6 Last In, First Out—Literal Interpretation—Two Closings—Starting with Market.
7 Last In, First Out—Opening Inventory Reservoir—Starting with Market—Same results with Accumulated Difference Method.
8 Costing Sales at Replacement—Starting with Market.
9 Normal Stock Reserve Method.


ACCUMULATED P & L UNDER CERTAIN VARIOUS ACCOUNTING METHODS
116.25
60.00
81.00
60.00
94.00
60.00
43.50
30.00
70.00
60.00
60.00
0.20
0.10
#1 Cost or Market Double Entry Cost
#2 Cost or Market Merchandise Account
#3 Cost
#4 & #5 Last in, First out Lateral - 8 Closings
#5 Last in, First out Lateral - 2 Closings
#8 Cost of Sales at Replacement
#7 Last in, First out Opening Inventory Reservoir or Accumulated Difference
#9 Normal Stock Reserve
Raw Material Prices

THE ARCHIVES OF THE HUDSON'S BAY COMPANY

By Gordon Briggs, Winnipeg

TONS of paper, documents, journals, ledgers and correspondence books—all are part of the archives of the Hudson's Bay Company in London. Ever since its incorporation in 1670 and even before that date there has been a constant flow there of records relating to the company's various activities in North America. These, with the volumes accumulated in London, minutes of the committee meetings, personal letters, etc. form an enormous mass of material—a goldmine to the student of Canadian history.

For over two centuries the Company paid only cursory attention to its illustrious history, and its officers could see no reason for making it public. After all it was the Company's history—an honourable one, of peaceful co-operation with the Indians, of bitter struggles with the French, of adventurers fighting ice and cold in winter and dangerous fast running rivers in summer to explore places where no white men had ever been before. This negative attitude, however, changed gradually in the early part of this century as the Company reluctantly opened its doors, with some qualifications, to historians. Then in 1920 Sir William Schooling was engaged to write a history to commemorate the 250th anniversary of the incorporation of the Hudson's Bay Company. This preliminary work soon revealed that the vast weath of material lying in the vaults of the Company's Lime Street Warehouse would bring to light many new facts and stories of Canada.

In 1932 this historical material was moved to the new Hudson's Bay House, Bishopsgate, and Prof. R. Coupland of Oxford University and C. Hilary Jenkinson of the Public Records Office were asked to inspect it and make suggestions for its classification and safekeeping.

Steel shelves were made to replace the old wooden boxes, with diagrams drawn indicating the layout and position of various shelves; inventories as complete as possible were compiled, and a card index to the inventories prepared. The whole archives prior to 1870 is divided into five sections, each section being subdivided into classes and again into pieces.

In section A, for instance, which consists of London Office records, minute books and other documents, there

are many interesting little stories— they may almost be called a history within a history. One of these mentions Sir Christopher Wren, a member of the Committee, who is better known as the man who did the gigantic job of reconstructing St. Paul's Cathedral. His architectural skill was needed; so the Committee commands "That such shutters, bolts & locks be made to the Warehouse as Sr. Chris. Wren shall judg fitt to be done & the Secretary to see it accordingly done with Expedition."

There is also in this section a notice of the first sale of Company furs, arranged at a meeting of the Committee at Sir Robert Viner's house on 14th November 1671. The following resolution was passed: "That Mr. Rastell take care to putt up publick bills upon the Exchange to morrow morneing for sale of li. 3000; weight of Beaver coates & skins at Mr. Garways coffee house upon tuesday the 5th Xber (Dec.) at two a clocke afternoon, accordeing to former orders made the 24th of october & 7 of November & yt. Mr. Ely with the advise of Mr. Parham doe forthwith put the sayd beaver into thirty Lottes fitt for Sale." This first fur auction of the Hudson's Bay Company was later postponed till early in 1672. In 1936 furs to the value of over ten million dollars were sold at the Company's various auctions.

Not only the proceedings of the Committee in London are recorded in the minute books, but there are many references to "the trade" and other events on the other side of the ocean. On the 13th October 1686 it is stated that

"... Capt. Abraham late Governor at Port Nellson came before the Committee acquainting them of his precedings there & how he did the last spring sayle 50 leagues Northward of Port Nellson & discovered a faire River (The Churchill)." The Committee "ordered he bring in writing the said discovery."

It was more than a year after when the Committee decided "that Churchill River bee settled this yeare." The river, and now the town, received the name from the governor of the Company at the time, John Churchill, the Duke of Marlborough.

Among the most interesting features of the archives are the London office correspondence books, which include sailing instructions to the commanders of the Company's

ships, private correspondence with servants in America and copies of commissions granted by the Company to governors of the forts in Hudson Bay. The first book of this series contains copies of the petitions to the government, appealing for help against "the common enemies of all mankind, the French." After 1753 the correspondence grew to such an extent that a new series of books was established for letters to the public, to the proprietors of the Company and to manufacturers of goods in Great Britain.

During the strife between the Lord Selkirk Settlers at Red River and the North West Company from 1813 till 1821 there were enough appeals to the government for protection to warrant another new series of letters, which also includes replies from the government. There are four volumes called "Locked Private Letter Books" covering the period 1802-1875, consisting mainly of private confidential letters from governors of the Company to their officers in America. Among these is a table showing the fluctuations in beaver skin prices from 1827-1836, and letters regarding Capt. Geo. Back's expedition to the Arctic by land.

From instructions to governors in the Bay the following extract regarding Charlton Island in James Bay is of interest: "Wee do judge by the situation of Charlton Island, that no place is so convenient as that for the Rendezvous from our severall Factories to attend the arrivall of our Ships from hence. And wee hope before this comes to you a good large dry substantiall Warehouse will be there erected to receive the Cargo we send you, as it was agreed to before Mr. Baily (ex-governor of Albany who returned to England for furlough and died there) left you."

In a letter to Mr. Baily, dated 29th May 1680, we learn that "severall sorts of seeds" were sent to the Bay "to make the Experiments." Thus farming was first started in a small way in the North-west.

At the same time the Committee expressed their views on the keeping of pigs: "Upon Hayes Island where our grand Factory is you may propergate Swine without much difficulty, wch is an excellent flesh, and the Creature is hardy and will live where some other Creatures cannot. And upon so little a spot of grounds as that Island. you may wth your men who will be constantly attending the Factory, and hunting up and down, guard them against Bears, Wolves or any other Creatures of prey that may

come over upon the Ice from the Mainland. So that we think you might be in a great measure supplied with that sort of provisions with reasonable care, and wee therefore desire you to be diligent therein."

Throughout all the letters from the Committee to the governors of the factories on the Bay there are passages of good sound advice, building staunch character and friendly attitude in the wintering partners. One of these, in a letter to Governor Nixon on May 1682, urges him to use lenity and forbearance in dealing with the natives and Company men: "Wee must let you know wee had complaints from most of our Servants (that returned upon the last ships) that you have carried your Selfe with to much inhumanity and cruelty towards the Natives wch is very ill done For Allthough (in prudence) You must allwayes bee carefull of your Selfe, and bee upon your Guard for your own Safety & preservation, Yet Experience teaches that mild and Gentele Usage doth more obtaine upon the most Savage Natures then to much Severity.

"Wherefore wee now caution you to take heed that ye morossness of your temper turne not to the prejudice of our affaires, which advise wee also extend to the Government of your selfe in your deportment towards our owne servants under your Command, towards whome your deportment ought to bee affable and obligeing wch is better Supported by a prudent lenity than by too much haughtiness and severity.

"But wee doe not intend by this that you should lett your Kinds of Government lie too loose neither, for there may as much mischeife arise from thence, Wee being sensible anough what sort of men you have to deale with, Only Observe this as a good Generall rule are moderation in all things, and as a meanes to draw our Servants to Love & obey you, Let them know that such as Shall behave themselves most meritoriously upon your representing theire services to us with your Opinion what increase of Wages they may deserve, Wee shall take greate Notice of the Character you shall give. . . ."

In the London Office correspondence books there is an interesting reference to the death of King William III in March 1702, the news of which was carried by the "Hudson Bay Frigate" to Governor Fullertine at Albany nearly six months later—a great contrast to the death of the late

King George V, when the news was flashed around the world and known in nearly every northern outpost within a few hours.

The value of archives cannot be appraised in dollars and cents. Anyone who can delve intelligently into historical records and bring the experiences of men and companies over centuries to work in his own affairs commands a powerful advantage over his fellow man, who has only a lifetime to gain experience to guide his judgment.

The Hudson's Bay Company announces that for the purpose of publishing their unique archives the Hudson's Bay Record Society will shortly be inaugurated. The council of the new society will include Mr. Ashley Cooper, the Governor, Sir Campbell Stuart, Lord MacMillan and Sir Edward Peacock. The subject of the first volume to be published in 1938 is George Simpson's Athabasca Journal and Report of 1820-21.

THE INCOME TAX DIVISION

Of the Department of National Revenue, Ottawa

[*Note:* In an address to the members of the Commerce Club of the University of Toronto on 30th November last, Hon. J. L. Ilsley, Minister of National Revenue, spoke on the work of the three divisions of his Department—Customs, Excise, and Income Tax. That part of his address dealing with the Income Tax Division is given below].

LET me say a word now about the third division, the Income Tax Division. Here, as in the other divisions, there has been a great increase in revenue during the past two years. During the last twelve months we have collected over $117,000,000, about $41,000,000 more than two years ago.

The income tax, as you know, was instituted in England by that remarkable man who became Chancellor of the Exchequer at twenty-three and Prime Minister at twenty-four years of age, William Pitt the Younger. He introduced it in 1798, and more nearly in its present form, in 1799, as a war measure, just as our income tax was introduced in 1917 as a war measure. Unlike our tax, the English tax was removed in 1802 when England made peace with Napoleon at the Treaty of Amiens, but when war broke out again in 1803, it was reimposed. After Waterloo, the tax

was taken off again and there was no income tax in England between 1816 and 1842. In 1842, Sir Robert Peel, not for war purposes this time but for reasons of financial necessity, reintroduced an income tax measure and it has been a feature of the English financial system ever since.

Some of you may have seen the moving picture "Victoria the Great," which is now being shown in Canada. You will remember the conversations between the Queen and the Prince and with Sir Robert Peel about income tax. It was being discussed by German economists; it was regarded as very heavy at 7d. on the pound; it was stated to be an emergency or temporary measure; the action of Pitt forty years earlier was referred to, and so forth. Well, Peel's action was taken in the "hungry forties." He intended the measure to be temporary. With the repeal of the Corn Laws in 1846, there began a trend from indirect to direct forms of taxation and the income tax came to be regarded as the sheet anchor of English governmental finance.

Based Upon British Act

Our *Income War Tax Act* is in its principles based largely upon the British Act but in some of its features more closely resembles the American. The United States levied an income tax at the time of the Civil War. Later, in the nineties, they enacted a federal measure, but the Supreme Court of the United States declared it unconstitutional and it was necessary for the 16th Amendment of the Constitution to be passed before Congress could reimpose a federal income tax in the American Union. This it did in 1913; and income tax in the United States as in England, has become a most important source of revenue.

In Canada, as in Great Britain and the United States, it was hoped and expected that it would be a temporary measure but that hope has long since disappeared. In all three countries the income tax is not only with us but the subject of many humorous remarks and the cause of much exasperation. The story is told of a clerk in a Wall Street broker's office who informed his employer that they were taking up a subscription for a funeral wreath for an income tax collector with whom the firm was well acquainted. The broker said "Put me down for $5." A few days later the clerk approached the broker for the $5, and the broker handed him $10. The clerk said "You only subscribed $5."

The broker said "That's all right, here's $10, bury two of them."

An Important Feature

A most important feature of the British income tax is that capital gains or accretions are not taxed, nor are capital losses allowed as deductions. We have adopted this feature in our legislation, differing from the United States in this regard. The result of this difference is most interesting. In the United States in a period of rising security prices and large profits on the stock market, income tax revenue is likely to soar very rapidly and very far, but in a period of stock market losses, the reverse is true and the Secretary of the Treasury is likely to find himself disappointed in his expectations. In other words, there are large fluctuations and great instability in the income tax revenue of the Republic as a result of their system of taxing capital gains and allowing capital losses as deductions from income. Between 1930 and 1933, the revenue from income tax in the United States went down from $2,402,000,000 to $746,000,000, a reduction of over two-thirds, even though the rates were increased, while in Great Britain and Canada a condition of stability obtained.

In one other respect, however, we have followed the United States instead of Great Britain. Great Britain, ever since 1799, has obtained the greater part of her income tax revenue at the source, that is, from those who paid the taxpayer his income, instead of from the taxpayer himself. This rule has been followed to only a slight extent in the United States and Canada, where information is obtained at the source but the taxpayer himself pays the Government his income tax.

Praiseworthy Co-operation

The officers of the Income Tax Division, like those collecting sales tax, must depend to a considerable extent upon the honesty, good faith and co-operation of the income taxpayers of Canada. Generally speaking, the co-operation which we receive from the tax paying public of Canada is most praiseworthy. There is the odd exception and when that exception comes to light, when taxpayers have attempted to conceal the truth and evade the tax, the department has to proceed with strictness, if not severity.

Of Dominion income tax, $56,000,000 was in 1936 collected from corporations and $36,000,000 from individuals.

The Government of Canada is often criticized because the income tax is not as steeply graduated as it ought to be. Our corporation tax is not graduated at all and it seems to me that on principle it should not be, but our individual income tax is rather steeply graduated, more so on the higher incomes than is that of the United Kingdom. Less than 10 per cent. of the income taxpayers pay more than 90 per cent. of the taxes.

Provincial Levies

In this country, all the provinces except Nova Scotia, New Brunswick and Quebec, levy income taxes, and in many of the provinces municipalities do so as well, so that in some provinces the total income tax burden upon the individual of large income is very great indeed. Moreover, it must be remembered that there is double taxation in this sense, that corporations pay a 15 per cent. income tax and shareholders pay an individual income tax over again on the dividends they receive from those corporations, a feature which does not exist in Great Britain.

I have no opinion to express as to whether our income tax should be lighter, heavier, more steeply graduated or less steeply graduated. On the one hand, it may be said that a heavy and steeply graduated income tax is necessary if our capitalistic system is to exist at all. It is a form of redistribution of wealth and the process of wealth redistribution must go on perpetually if decent standards of life among the masses of the people are to be maintained and if more radical and possibly revolutionary steps are to be avoided. On the other hand, while the capitalistic system is with us we require capital and we require men with capital, and too great severity in an income taxing system, whether corporate or individual, is likely not only to discourage the accumulation of capital but to drive both capital and capitalists out of the country.

Calls for Great Wisdom

The formulation of income tax policy calls for the greatest wisdom and admits of few generalized statements. In this country, our income tax act has been amended time after time, here a little and there a little, all the time in such a way as to stop up loopholes and to yield more revenue, but with a view to avoiding the dangers to our development as a nation which I have indicated.

As most people know, there is a flow of capital from country to country with a view to avoiding and evading income taxation. Indeed, the problem of preventing the losses of revenue that these movements and manipulations cause has become a major problem of many governments and has received, and is receiving the attention of the League of Nations. There is no doubt in my mind that, as the years go on, there will be more and more co-operation between governments for the prevention of fiscal fraud and evasion.

Two Great Essentials

I hope that in my remarks I have given some idea of the magnitude and importance of the operations of the Department of National Revenue. We come more closely, I think, than any other department into contact with the commercial, industrial and financial life of Canada. In the administration of our taxing laws, the great essentials are fairness and equality of treatment. The *bête noire* of all Ministers of National Revenue is the accusation of discrimination. Dealing not with a few important policies of broad scope but a large number of transactions, continually importuned to make exceptions for one reason or another, every Minister must be firm in his stand against inequality of treatment of taxpayers.

There is no department in which considerations of partisanship have less place than in this one. This is reflected in the continuity and stability of our personnel. There has been a gradual downward curve for many years in the number of dismissals and replacements for political reasons. Since I have been Minister, there has not been a single dismissal for political partisanship.

INCOME WAR TAX ACT DECISION

The Peter Birtwistle Trust Case

PETER BIRTWISTLE, a Canadian citizen but with evidently a strong sentimental affection for the Town of Colne in Lancashire, constituted The Trusts and Guarantee Company, Limited, his Canadian trustee for the purpose of administrating a fund under unusual trusts. The assets, after several preliminary agreements which were cancelled and replaced, were lodged with the Canadian trustee in 1918 upon trust to realize and invest the proceeds and to accumulate the income, except for certain specified charges, for a period of twenty-one years and then to turn over the trust assets and accumulations to the Colne trustee. Peter Birtwistle died in 1927 and it was estimated that twenty-one years thereafter the fund would exceed a million dollars.

The Trusts—The Canadian trustee was directed on the expiry of the twenty-one years to turn over the fund to the municipal council of the Town of Colne to be used for the benefit of the aged and deserving poor of the town in such manner and without restriction of any kind as should be deemed prudent to the council. The settlor also declared his wish that any part of the fund not immediately required should be left under the administration of the Canadian trustee because of the likelihood of a higher return on the investments.

Income Tax—The trustee made returns under the *Income War Tax Act* for the years from 1919 forward but no assessments were made until 1936 at which time assessments were made on the income of the trust for all the years 1919 to 1934, inclusive, with interest on all. These assessments and the imposition of interest were challenged by the Canadian trustee. The action of the income tax department was apparently taken as a result of an application to the Supreme Court of Ontario by the Canadian trustee in 1935 for approval of a compromise with the Colne trustee by which the fund would be distributable in instalments commencing immediately and not in 1948. The trustees felt that the trust could be broken on the well-established principle that the Court will recognize the right of all persons who attain the age of twenty-one years to enter upon the absolute use and enjoyment of property given to

and vested in them notwithstanding directions to accumulate beyond that time, provided no one else is interested either in the fund or the accumulations. The application was rejected by judgment of Chief Justice Rose of the Ontario High Court who thought an action should be brought to bring the matter properly before the Court but who expressed his doubts as to the likelihood of success of such an action in any event. Others than the Colne trustee had an interest in the fund.

Charitable Trust—Charitable Institution—Mr. Justice Maclean gave judgment on 4th January 1938 validating the assessments and the imposition of interest. He pointed out that by virtue of section 11(2) income accumulating in trust for the benefit of unascertained persons was taxable in the hands of the trustee as if it were the income of an individual. The section did not exempt income of a charitable trust. His Lordship also considered section 4 which by subsection (e) exempts from taxation the income of any charitable institution. After pointing out that he had not been referred to any helpful authorities, the learned judge came to the conclusion that, while the Canadian trustee was administering a charitable trust, the trust could not be described as a charitable institution. He recognized that the income was accumulating for the benefit of a class, the members or units of which were presently unascertainable and would always be fluctuating, that the trust could never vest in that class, that they could never discharge the trustee, and that the interest of the class could never be more than an equitable interest. There was furthermore only one trust even though there might be many recipients. A charitable institution, His Lordship defined as an organization created for the promotion of some public object of a charitable nature and functioning as such. It was clearly distinguishable from a charitable trust. In any event, the income was not the income of a charitable institution as it could not be presently enjoyed.

Interest — On the subject of interest, His Lordship thought a correct reading of the Act vested no discretion in him. Under section 55, if no assessment has been made, the taxpayer continues to be liable for any tax and to be assessed therefor and the Minister may from time to time assess, re-assess or make additional assessments upon any person for tax with interest and penalties. Section 66 which

gives jurisdiction to the Exchequer Court concludes with the words "and in delivering judgment (the Court) may make any order as to payment of any tax, interest or penalty or as to costs as to the said Court may seem just and proper." Mr. Justice Maclean found the quoted part of section 66 extremely awkward and confusing but in view of the wording of section 55 he felt that there should be a very clear discretion vested in the Court before he could interfere with the defined principle of the Act that the imposition of interest in respect of any tax not paid when due was indiscriminately to be applied. He thought that possibly the Minister had power to waive or dispense with interest. To hold otherwise would mean that the Court had a discretion to interfere with the liability for payment of the tax and that that was not something to be determined wholly accordingly to the provisions of the Statute.

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1937-38

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GENERAL NOTES

Our Sympathy Extended to Mr. Parton

The Editorial Committee know that they express the feeling of the whole membership of the Dominion Association when they extend sincere sympathy to Mr. John Parton, the Editor of the Terminology Department, in the sudden death of Mrs. Parton at Winnipeg on Wednesday, 29th December last. Although Mrs. Parton had not been in the best of health for the past two years and had been subject to heart attacks, her death came as a great shock to her family and numerous friends. It was in the hope that a change of climate would be beneficial to her that Mr. Parton had recently been making plans to take Mrs. Parton to England next summer for a year's visit with relatives there.

Socially prominent and a hospitable entertainer, Mrs. Parton was interested in a number of charities of which she was a generous supporter. She was a member of St. George's Church in Winnipeg and of the Winnipeg Winter Club.

There is no instalment of the Terminology Department this month.

Our Contributors this Month

Rutherford Williamson, who is personally known to a large number of members of the profession in every province, writes this month on the shoe manufacturing industry. He was among the first members of the Dominion Association of Chartered Accountants, which was incorporated in 1902. He is a Fellow of the Ontario Institute and one of its former Presidents. Albion R. Davis, who explains the "stabilized" basis of inventory valuation, is a graduate in mechanical engineering (1912) of the Massachusetts Institute of Technology. For some time he was associated with the public accounting firm of Scovell, Wellington & Co. of New York, and for the past nine years has been controller of the American Hide and Leather Co. He is also chairman of a special advisory committee of the Tanners' Council of America which has been endeavouring to develop some suitable form of accounting which would tend to rationalize profits over the years of fluctuating prices. Gordon Briggs, who tells us something about the interesting historical records of the Hudson's Bay Company, is a member of the Company's staff at Winnipeg.

THE 1937 ESSAY COMPETITION

The Editorial Committee is pleased to announce this month the results of The 1937 Essay Competition, the rules for which were published in the July and August issues of THE CANADIAN CHARTERED ACCOUNTANT. The contestants were given the privilege of making their own choice of an accounting subject.

Messrs. William Aitken, President of the Institute of Chartered Accountants of Manitoba, and James B. Sutherland of Messrs. George A. Touche & Co., Winnipeg, acted as judges, and the thought and care which they gave to this work is very greatly appreciated by the Editorial Committee. Their report is as follows:

Winnipeg, 20th January 1938.

The Editorial Committee,
The Canadian Chartered Accountant.

Gentlemen:

The first difficulty which confronted your judges in grading the essays as submitted for the 1937 Essay Competition was the question as to what actually constitutes an essay and if that term should properly include articles of a purely descriptive character. However, the precedent established on a previous occasion has served as a guide in this particular case and critical and descriptive compositions have been admitted on equal terms. The practical aspect of the subject matter has been a determining factor in arriving at a decision. In the opinion of the judges, the order of merit of the respective essays is as follows:

First Prize—Essay #4—"Accounting for an Interurban Motor Coach Company,"

Second Prize—Essay #6—"The Auditor, the Client and the Public."

Honourable Mention: Essay #10—"Depletion in Metal Mines for Income Tax,"

Essay # 9—"Accounts of a Mortgage Loan Company."

The topics selected in the essay competition were well chosen and, in certain cases, the papers were particularly well written. A competition under the present regulations, however, raises a question in the minds of the judges as to whether men who have but recently passed their final examinations are qualified, more particularly in view of their limited experience, to deal effectively with subjects which might well call for the considered opinions of older and more experienced members in presenting analytical or interpretative data, although as literary compositions the writings of these younger members might possess distinct merit.

Yours faithfully,
Wm. Aitken
James B. Sutherland
Judges, 1937 Essay Competition

In keeping with the rules of the competition, the names of the contestants were unknown to the judges and to the Editorial Committee until after the judges had made their report. The prize winners are as follows:

First Prize of $50—H. S. Moffet, C.A., Prairie Coach Lines, Limited, Regina, Saskatchewan.

Second Prize of $35—Howard I. Ross, M.A., C.A., P. S. Ross & Sons, Montreal.

Honourable Mention—Stanley B. Laing, C.A., Provincial Income Tax Office, Winnipeg; and Irvin T. Hunt, C.A., Office of Comptroller-General, Winnipeg.

"Incidence" of Tax Returns

According to *The Saturday Evening Post*, "In 1927 the Curtis Publishing Company filed 14 tax returns with Federal, State and local governments. It cost $850 to prepare them.

"1937 this company filed about 44,500 tax returns, the cost of preparing which was $21,000.00.

"1927 this company filed one return in Canada. In 1937 it filed one return there."

Canadians acknowledge this bouquet handed to our country by the *Post*, and only wish that the reference to the simplicity of our tax system were deserved.

Everybody reading the representations made to the Rowell Commission which is sitting at Ottawa these weeks, cannot fail to notice the references to, and protests against, the innumerable public taxing bodies in this country of eleven million people, and the unnecessary multiplicity of annual tax returns required.

LEGAL DECISIONS

[EDITOR'S NOTE: The following are brief summaries of recent decisions of the Canadian Courts as taken, by the kind permission of the Canada Law Book Company, from the *Dominion Law Reports*. In each case reference is made to the volume of the *Reports* where the full judgment may be found. It should be kept in mind that the decisions given may not in every case be final.]

Succession duties — Gift inter vivos — Donee dying before donor

(Re Boyd)

Supreme Court of Ontario

Since it is property which is the subject of succession duty, the fact that the donor of a gift died some years subsequent to the death of the donee does not effect a change in the result as to the property upon which duty is to be charged. Upon the death of the donor such gift forms part of the donee's estate, which is liable to pay the duty, and until paid, the duty remains a charge on the property; hence it cannot be paid out of the residue but is payable proportionately out of the share or interest of each of the legatees under the will of the donor as are not exempted by the will itself.—[1937] 4 D.L.R. 791.

Succession duty—Company shares—Registration in Quebec —Owner domiciled in Ontario—Dividends

(Toronto General Trusts v. *The King)*

Quebec Superior Court

Shares in the capital stock of a company having its head office in Montreal, belonging to a person domiciled in Ontario, registration of which was made in Montreal but certificates for which were in Toronto at the time of the death of the owner, are really situate in Ontario and not subject to succession duty in the Province of Quebec. Registration does not fix the situs of the rights which the shares conferred as, by virtue of s. 4 of the *Companies Act*, R.S.C. 1927, c. 27, their transfer and registration might validly have been effected as well at Toronto. But dividends accrued and due on said shares being debts payable by a debtor (the company) domiciled in Quebec are subject to death duty.—[1938] 1 D.L.R. 40.

Wills—Annuities—Income from fund—Charge on corpus

(Re Gilroy)

Manitoba King's Bench

A direction in a will to set aside a fund and to pay the income therefrom as an annuity during the life of the annuitant, entitles the latter to be paid the specified yearly amount from the investment fund, whether the income thereof is sufficient or not; such an annuity constitutes a charge on the fund as well as on the income, taking effect from the date of the testatrix's death, and it is the duty of the executor or trustee to maintain a sufficient fund to pay the annuity, without deduction or amortization and to convert the assets of the estate, including company shares, for purpose of the trust without any unnecessary delay.—[1937] 4 D.L.R. 500.

PROVINCIAL NEWS

MANITOBA

The quarterly dinner of the Institute of Chartered Accountants of Manitoba was held Wednesday evening, 15th December, at the Fort Garry Hotel. Professor Robert McQueen addressed the gathering in an informal way concerning Canada's monetary policies. After surveying some of the problems of the Western part of the Canadian economy from the constitutional aspect, the speaker dwelt on the effects of currency control on these difficulties. A comparison was made of the various methods employed by the governments here and in Australia and other parts to correct inequities. He concluded with a résumé of the opinions of economists on the effects of various governmental policies.

President William Aitken opened the business by the presentation of certificates of membership to five of the class of recently successful candidates. The members gave a hearty welcome as each new member came forward, the recipients being Alan Findlay, Alex. Hunt, Frank Haddock, Chas. A. Read and D. G. White.

Following the dinner, a regular business session of the members took place. Assisted by Secretary Fred C. Gilbert, Mr. Aitken as Chairman handled the discussion in a very efficient manner, and there was much lively expression of

opposing viewpoints. Discussion centred about the work of the Council and many suggestions were made towards strengthening the professional standards of the Institute and adding to the interest in the meetings.

The head table included Professor McQueen, Wm. Aitken, T. W. Saul, John Parton, J. B. Sutherland, W. J. Macdonald, F. Johnson, F. C. Gilbert and S. B. Laing.

SASKATCHEWAN

Following are the results of the examinations of the Institute of Chartered Accountants of Saskatchewan held in November, 1937:

Final Examinations Passed—Thomas E. Donnelly, Moose Jaw; S. A. Wik, Swift Current; James C. Byers, Miss Velma E. Lock, and John S. Ross, Saskatoon; Karl Graber, H. Austin Hunt, Maurice V. Jeffery, and John C. McCay, Regina.

Intermediate Examinations Passed — George M. Fraser, Saskatoon; James Chester Garner, Weyburn; and George Scrimgeour, Regina.

Supplemental Final Examinations Granted — David S. Hutcheon, (General Accounting), Saskatoon; J. Arthur Kidd, (Business Investigations), Ottawa, Ont.; A. L. Pickard, (Business Investigations), Niagara Falls, Ont.; John I. Dickey, (Business Investigations), William A. Fowlie, (Economics), Gordon B. Wilkinson, (General Accounting), William G. Harding and John S. Renouf, (Business Investigations), all of Regina.

Prizes—The Institute prize for Intermediate Examinations was awarded to George Scrimgeour, Regina.

PERSONALS

Messrs. Walter I. Sheper and Hyman N. Dobrin, Chartered Accountants, announce that they have entered into partnership under the firm name of Sheper, Dobrin & Co., with offices at Suite 607, Mayor Building, 1449 St. Alexander Street, Montreal.

Charles J. McCabe, Chartered Accountant, wishes to announce that he has opened an office for the practice of his profession in the Concourse Building, 100 Adelaide Street West, Toronto.

CORRESPONDENCE

Editor's Note: We publish this month two solutions to the problem described in the letter which appeared at page 475 of the December issue. To enable the reader to follow the reasoning we publish the letter again.

Montreal, November 6, 1937.

The Canadian Chartered Accountant,

Dear Sirs:

We shall be pleased if you will advise us what is considered to be good accounting practice in the following case:

"Company A is engaged in erecting buildings on its own account and selling them. In several cases it has had to repossess the buildings due to inability of purchaser to continue payment on balance of purchase price. A typical case follows:

Sale price	$150,000.00
First mortgage assumed by purchaser	100,000.00
Cost of land and building	125,000.00
Down payment of purchaser	25,000.00
Apparent profit to builder (vendor)	25,000.00

As the full purchase price has not been paid and hence the profits not competely realized, the company sets aside a reserve for unrealized profits, in this case being $12,500.00 and took up $12,500.00 in its current P. & L.

Two years later the building is repossessed. During this period, the first mortgage is reduced to $98,000.00 (through payments by the purchaser). The company has received $3,000.00 in reduction of the balance of sale, and has accordingly credited P. & L. with $1500.00 and charged Reserve for unrealized profits with $1500.00, so that the reserve is now $11,000.00.

At the date of repossession there are taxes and interest in arrears of $3000.00, which the company will have to pay. Assume depreciation on the building in question is $2500.00 per annum, at what figure should the building be repossessed on the books of the company and what are the required entries? Is there any profit made on its repossession?

Thanking you for your advice in this matter, we remain,

Yours truly,

"Subscriber."

SOLUTIONS

First Solution:

In an enterprise of the nature referred to, the measure of profit on any transaction must be the amount of cash received by the vendor in excess of the cash which has been temporarily invested in the properties sold. Where prior mortgages exist, any reduction in the prior mortgage contributed by the purchaser must on repossession be a cash realization of the vendor.

In the case in point, the vendor recovered from the sale at once all the cash which has been temporarily invested, $100,000.00 by the assumption by the purchaser of the first mortgage and $25,000.00 by the down payment of the purchaser. The vendor was now fully satisfied for all his costs, and any further cash which he could realize on the transaction would be profit to him.

As a matter of fact, he realizes during the period from the date of sale up to and including the date of repossession exactly $2,000.00 represented by the amount paid in reduction of the first mortgage. The amount of $3,000.00 received on account of the balance of the sale agreement is used to pay interest on the first mortgage and taxes in arrears and has no resultant effect on the transaction over the whole period mentioned above.

The matter of depreciation of the building during the two years does not enter into a discussion of the accounting at this time. Company A might have, as well, introduced the subject of appreciation or depreciation in land values during this period. None of these factors can be determined until a subsequent sale, and any accounting for these at the present time would be a matter of revaluation and not an accounting for realized profits and losses.

We, therefore, find that Company A takes back a property which cost it originally $100,000.00, because it realized $25,000.00 of the total cost in cash at the time of sale. It has gained the $2,000.00 reduction of the first mortgage, because its equity in the property has increased by the contribution of the purchaser. The property should therefore be brought back on the books of the company at $100,000.00, First Mortgage account should be credited with $98,000.00 and Profit and Loss account should be credited with $2,000.00.

To correct the earlier accounting, Surplus account (prior profits) should be debited with $14,000.00, Reserve for Unrealized Profits debited with $11,000.00 and the Sale Agreement account credited with $25,000.00. On the disbursement of $3,000.00 for interest and taxes in arrears the Sale Agreement account will be debited with this amount, and the correcting entries will be complete.

In my opinion, the fault in the original accounting for the transaction was this—that the company took to Profit and Loss account an amount which never was a profit. The amount of $25,000.00 represented by the sale agreement was a valuation placed on a right of re-entry only exercisable if and when the purchaser failed to fulfil certain conditions mentioned in the agreement. The company could only realize a profit to the extent that the purchaser did contribute under these conditions and he failed to make any contribution except the temporary one of $3,000.00.

I would suggest that in future occasions, the company set up a Deferred Income Account for the whole amount of the sale agreements, reducing this account and crediting profits from time to time as recoveries are made on the sale agreements. Then when properties are repossessed they will be taken back on the books at a figure equivalent to the original cost less the down payment received, first mortgage account will be credited with the balance re-assumed and profits credited with the difference, which will represent the payments made by the purchaser on the first mortgage.

A different situation would arise if the sum of the original first mortgage and the down payment were not equal to the original cost. In this case, no profit would be taken until realizations on either the first mortgage or the sale agreement amounted to the deficiency. Conversely, if the sum of the original first mortgage and down payment were in excess of the cost, a profit would be realized immediately to the extent of this excess.

Second Solution:

The difficulty of solving this problem arises from the misunderstanding shown by the concern involved, of the nature of "realized profits."

"Subscriber" refers to the profits not being "completely realized." In the opinion of the writer this is utterly confusing. Profits are realized when the consideration for the sale of an asset takes the form of money or a legally enforceable claim to the receipt of money (or something convertible into money).

The fact that the amount of the mortgage plus the down payment did not equal the purchase price is entirely immaterial—for collection of the balance of $25,000.00 is enforceable at law.

This misconception has evidently led to the illogicality of supposing that in some way there exists a relationship between the balance of the purchase price and the amount of profit. This in turn has led to the assumption that the payment of $3,000.00 represents the realization of a profit of $1500.00. The full profit of $25,000.00 was realized on title to the property being transferred, and on the vendor's enforceable claim to the receipt of $150,000.00 being established.

In all cases where assets are sold and where *cash* payments are to be made over a long period of time, no problems of *income computation* different to such as are involved in computing bad debts arise. The problem that does arise, is one of income *distribution*, for the full cash payment not having been received, current funds may not be available for the distribution *in cash* of the realized profit.

The solution suggested by the writer is as follows:

Dr. Accounts Receivable	$ 25,000	
Dr. Mortgage Payable	100,000	
Dr. Cash	25,000	
Cr. Sales		$150,000
To record sale of building for consideration indicated in above entry.		
Dr. Cost of Sales	125,000	
Cr. Materials, wages, etc.		125,000
To record cost of building sold.		
Dr. Taxes on building repossessed	3,000	
Cr. Taxes payable		3,000
To record liability for unpaid taxes.		
Dr. Repossessed building	123,000	
Cr. Accounts receivable		22,000
Cr. Taxes on building		3,000
Cr. Mortgage payable		98,000
To record acquisition of building at cost, which is assumed to be less than replacement cost, and not in excess of selling price.		

No entry has been submitted with respect to "unrealized profits"—for such an entry would be required only if it was thought necessary to prevent the distribution (in dividends) of current funds.

Assuming however that this problem is to be solved on the assumption that such a reserve *was* created, on the repossession of the building there is no reason why the balance of $11,000, should not be transferred back to surplus, *unless* for the reason mentioned above it was thought desirable to let it stand. The point is that the reserve has no connection whatever with unrealized profits.

"Subscriber" asks: "Is there any profit made on its repossession?" It is quite impossible for a realized profit to be made on the repossession of the building, for such a profit can arise only from the *sale* of an asset. A realized profit "on repossession" can be made only if the building is re-sold for more than $123,000.00.

The last entry above, brings the building onto the accounts at $123,000.00. It is taken for granted that if it is estimated that it will be sold for less, the necessary asset valuation reserve will be created.

To avoid misunderstanding it is thought advisable to point out that if the down payment had been, say $10,000, the building on repossession would be brought into the accounts at $125,000.00 i.e. at replacement cost. In this case a loss of $13,000 would be recorded and charged to a reserve for bad debts if such existed.

"Subscriber" states that it is to be assumed that "depreciation on the building in question is $2,500.00 per annum." In the writer's opinion the matter of depreciation does not arise. One is concerned here with an asset held for sale, not with a fixed asset. Therefore the cost less depreciation valuation of the building is of no significance, one is interested only in *market value*. The building may depreciate at the rate mentioned by Subscriber, at the same time its market value may increase, or it may decrease much below a cost less depreciation valuation.

The above entries result in the realized profit being brought onto income account at the time of sale. As suggested above, if it was thought that the concern's cash position did not warrant the distribution of this profit a reserve fund should be created—*not* however for "unrealized profits" but for "the protection of working capital."

In conclusion: the reserve of $12,500.00 instead of being regarded as a reserve fund (as suggested above) may be looked upon as a reserve for bad debts. This point cannot be decided without further information.

STUDENTS' DEPARTMENT

R. G. H. SMAILS, C.A., Editor

NOTES AND COMMENT

The [Dominion] *Companies Act, 1934* (Section 112(1)(d)) stipulates that the balance sheet shall indicate the basis of valuation of inventories. Scrutiny of a number of published balance sheets indicates that formulae commonly employed for this purpose are "below cost which cost is below market" and "the lower of cost or market, less reserve." There can be little doubt but that these formulae satisfy the requirements of the act; at the same time it is obvious that they do not give the reader the whole of the information which he requires for purposes of analysis of financial statements. Two essential pieces of information are withheld, first the absolute amount of the reserve (i.e. the excess of the lower of cost or market over balance sheet valuation) and second the change (if any) in the amount of the reserve since the date of the last balance sheet. If this reserve is purely an obsolescence reserve then there would seem to be no good reason why its amount should be revealed but every reason why the precise nature of the reserve should be stated. If on the other hand the reserve amounts to a conscious undervaluation of inventories and its amount is manipulated in order to adjust operating profit from period to period, then there is every reason—as indicated by the evidence adduced by the Royal Commission on the Textile Industry—why the amount of the reserve should be disclosed. Consistency in the basis of valuation of inventories is, generally speaking, more important in the interpretation of financial statements than is the precise basis used. If inventories are stated "less reserve" it is impossible for the reader to interpret the statement satisfactorily unless he is at least assured that the reserve is the same percentage of the "lower of cost or market" figure this year as it was last year. The question which we have raised is presumably only one aspect of the bigger question of secret reserves in general but it is one which is susceptible of separate discussion and treatment.

* * *

A very interesting review article appeared at p. 558 of "*The Accountant*" [England] of October 23 last on an essay

by Mr. R. S. Edwards entitled "The Rationale of Cost Accounting." Both the original essay and the review are calculated to disturb the complacency of the accountant and to set him thinking about the real significance and value of his conventional cost accounting procedure. It is impossible to summarize Mr. Edward's thesis in the space available in this column but it may be said to include the following propositions:

(1) Significant cost figures are not total costs per unit of output but the additional expenses due to additional operations. Thus the extra disbursements which are made necessary by the acceptance of another job, by the introduction of a new process, or by the opening of a new department are all of vital importance.

(2) Many outlays which are conventionally classified by the accountant as "overhead" costs are actually, in whole or substantial part, prime or direct costs in the sense that they would not be incurred if particular work was not undertaken.

(3) Since management can afford to sell its product at any price equal to or greater than "prime" cost rather than cease operations it is essential that management should at all times be furnished with comparative statistics of "prime" cost of total output (as defined in (2) above) at different volumes etc. of production. This information, and not a unit cost calculated by arbitrary allocation of so-called overhead expense, is what is really significant in the commercial and financial administration of an industrial enterprise.

Our readers would, we think, be rewarded by a perusal of the original article.

* * *

STUDENTS' ASSOCIATION NOTES

BRITISH COLUMBIA

We offer our congratulations to the successful candidates in the recent examinations, the names of whom appeared in the January issue of the magazine.

A number of years ago the Students' Council, in an effort to reduce the number of failures in examinations, made representations to the Institute to establish personally supervised courses. Members of the Institute decided to

act on these recommendations and the courses were established. The recent examinations marked the first occasion upon which students who had attended the personally supervised classes received an actual test of their knowledge. The remarkable success of these candidates must be very gratifying to those members of the Institute who have given so much time and effort to the training. We feel that the instructors have earned the gratitude of all the students for the excellent work done on their behalf.

Members of the Jericho Tennis Club very kindly extended an invitation to the students to attend a dance given by them on the evening of the completion of examinations. The dance was attended by many students and was a great success.

SASKATCHEWAN—Saskatoon

On December 17th, as an appropriate ending to the year's activities of the Students' Association, a dinner meeting was held in The Algerian Room of The T. Eaton Co. Ltd. A large number of the students and chartered accountants, resident in Saskatoon, were present.

The guest speaker was Dr. J. S. Thomson, the newly appointed President of the University of Saskatchewan. Dr. Thomson gave a very interesting and suitable address, in the course of which he congratulated those students who had passed the recent examinations.

Mr. Walter J. Weston, C.A., acted as chairman; Mr. Henry R. Clark, C.A., introduced the successful students; and Mr. J. H. Thompson, F.C.A., moved the vote of thanks to Dr. Thomson. The event was a very happy one.

PROBLEMS AND SOLUTIONS

Solutions presented in this section are prepared by a practising chartered accountant of the Institute from whose examinations the problem is taken and represent his views and opinions. They are designed not as models for submission to the examiner but rather as such discussion and explanation of the problem as will make its study of benefit to the student. Discussion of solutions presented is cordially invited.

PROBLEM I.

THE SOCIETY OF CHARTERED ACCOUNTANTS OF THE PROVINCE OF QUEBEC

INTERMEDIATE EXAMINATIONS, APRIL, 1937. ACCOUNTING—QUESTION 3.

The following was the Trial Balance for the six months' period ended 31st December 1936 of the Shaw Manufacturing Company.

Cash in hand	$ 600	
Cash in Bank of Montreal	20,000	
Accounts Receivable	280.000	
Direct Materials: Inventory at 1st July 1936	50,000	
Direct Materials: Purchases	190,000	
Direct Materials: Returns Outwards		$ 3,000
Work-in-Process: Inventory at 1st July 1936	12,000	
Finished Goods: Inventory at 1st July 1936	20,000	
Sales: Cash		2,300
Sales: Credit		450,300
Returns Inwards: Sales	5,000	
Inward Freight on Direct Materials	3,000	
Duty on Direct Materials	4,000	
Outward Freight on Goods Sold	5,000	
Machinery	100,000	
Reserve for Depreciation of Machinery		20,000
Factory Buildings	60,000	
Reserve for Depreciation of Factory Buildings		15,000
Land	40,000	
Factory Wages: Direct Labour	64,000	
Factory Wages: Indirect Labour	22,000	
General Factory Expenses	25,000	
Factory Power	8,000	
Factory Manager's Salary	5,000	
General Repairs to Factory Buildings	2,000	
Fire Insurance for Factory (6 months to Dec. 1936)	1,000	
General Manager's Salary	8,000	
Directors' Fees	6,000	
Audit Fees	4,000	
Salesmen's Salaries and Commissions	10,000	
Travellers' Salaries, etc.	6,000	
Salaries, General Administrative Office	13,000	
Expenses, Selling Department	8,000	
Expenses, General Administration	6,000	
Expenses, Shipping and Delivery	4,000	
Discounts for period	1,900	
Reserve for Discounts		2,000

Bad Debts made during period	1,700	
Reserve for Bad Debts		1,500
Bills and Notes Receivable	25,000	
Deferred Charges	500	
Interim Dividend Pref. Shares: 3 months to Sept. 30	3,000	
Interim Dividend Common: 25 cents per share	10,000	
Preferred Share Capital (2000 shares $100. fully paid 6%)		200,000
Common Shares Capital (40,000 shares of no par value)		200,000
Bonds: 6%		100,000
Earned Surplus		5,000
Accounts Payable		16,000
Bills and Notes Payable		9,000
Accrued Expenses Suspense		2,600
Bond Interest for 6 months to date	3,000	
	$1,026,700	$1,026,700

All adjustments for the period have been made, except those required for the following and for the preparation of the final accounts:—

(a) The Inventories at 31st December 1936 were valued as follows:—

Direct Materials	$56,000
Work-in-Process	29,000
Finished Goods	62,000

(b) Wages had accrued but had not been brought into the books as follows:
Direct $900
Indirect $300

(c) Depreciation Reserves were to be increased for the six months by the following percentages based on the book figures for the assets:—
Machinery—10% per annum
Factory Buildings—6% per annum.

(d) Bad Debts Reserve is to be brought into the Balance Sheet at a figure which equals ½ of 1% of the Accounts Receivable.

(e) Reserve for Discounts is to be brought into the Balance Sheet at a figure which equals 1% of the Accounts Receivable.

(f) The company makes a special increase in its selling price when it pays outward freight on goods sold.

(g) Provision for the remainder of the dividend on the Preferred Share Capital.

The following are required of you in answer to this question:—

(1) The Journal entries required to write up the necessary accounts for the final transfer of "Cost of Goods Manufactured" to "Finished Goods," commencing with the necessary figures above.

(2) Work-in-Process Account for the six months.

(3) Statement of Manufacturing for the six months.

(4) Statement of Trading for the six months.

(5) Statement of Profit and Loss, General Operations, for the six months.

(6) Statement of Net Income for the six months.

(7) Statement of Earned Surplus for the six months.

(8) Balance Sheet as at 31st December 1936.

Notes: (a) You may use abbreviations in giving the titles of accounts in your journal entries and elsewhere, provided that the identity of the account is unmistakable.

(b) Statements 4 to 6 inclusive may be contained in one statement.

SOLUTION

THE SHAW MANUFACTURING COMPANY
JOURNAL ENTRIES

ADJUSTING

(b) Factory Wages—Direct Labour	$ 900	
—Indirect Labour	300	
Accrued Wages		$ 1,200
(c) Depreciation of Machinery	5,000	
Reserve for Dep. on Machinery		5,000
6 mos. on $100,000 at 10% p.a.		
Depreciation of Factory Buildings	1,800	
Reserve for Dep. on Factory Buildings		1,800
6 mos. $60,000 at 6% p.a.		
(d) Reserve for Bad Debts	1,700	
Bad Debts		1,700
Writing off Bad Debts for Period to Reserve		
Bad Debts	1,600	
Reserve for Bad Debts		1,600
Adjusting Reserve to ½ of 1% of $280,000		
(e) Reserve for Discounts	1,900	
Discounts		1,900
Writing off Discounts for Period to Reserve		
Discounts	2,700	
Reserve for Discounts		2,700
Adjusting Reserve to 1% of $280,000		
(g) (After surplus amount is determined)		
Surplus	3,000	
Preferred Dividends Payable		3,000
Recording Declaration of Preferred Dividend for quarter ended Dec. 31/36.		

CLOSING

Work in Process	12,000	
Inventory Work in Process		12,000
Transferring Inventory as at July 1/36.		
Direct Materials	247,000	
Inventory Direct Materials, July 1/36		50,000
Purchases		190,000

Inward Freight		3,000
Duty		4,000
Returns Outward	3,000	
Inventory Direct Materials, Dec. 31/36	56,000	
Direct Materials		59,000
Work in Process	188,000	
Direct Materials		188,000
Direct Materials put in Process during Period		
Work in Process	64,900	
Direct Labour		64,900
Direct Labour Expended during Period		
Factory Overhead, Variable	55,300	
Indirect Labour		22,300
Factory Power		8,000
General Factory Expense		25,000
Factory Overhead, Standing	14,800	
Factory Manager's Salary		5,000
Fire Insurance—Factory		1,000
General Repairs—Factory Buildings		2,000
Depreciation of Machinery		5,000
Depreciation of Factory Buildings		1,800
Work in Process	70,100	
Factory Overhead—Variable		55,300
Factory Overhead—Standing		14,800
Factory Overhead Expenditure for Period		
Inventory, Work in Process	29,000	
Work in Process		29,000
Recording Inventory as at Dec. 31/36		
Finished Goods	306,000	
Work in Process		306,000
Recording Transfer of Goods Manufactured during Period to Finished Goods		

WORK-IN-PROCESS ACCOUNT

To Inventory W.I.P.—July 1st	$ 12,000	By Inventory W.I.P.—Dec. 31	$ 29,000
Direct Materials	188,000	Finished Goods (Cost of Goods Manufactured)	306,000
Direct Labour	64,900		
Factory Overhead—Variable	55,300		
Factory Overhead—Standing	14,800		
	$335,000		$335,000

THE SHAW MANUFACTURING COMPANY

MANUFACTURING STATEMENT—FOR SIX MONTHS ENDED DEC. 31/36.

To Inventory of Work in Process as at July 1st, 1936			$12,000
Direct Materials			
To Inventory Direct Materials as at July 1/36		$ 50,000	
Purchases	$190,000		
Inward Freight	3,000		
Duty	4,000		
	197,000		
Less Returns Outward	3,000	194,000	
		244,000	
Less Inventory Direct Materials as at Dec. 31/36		56,000	188,000
Direct Labour			64,900
Factory Overhead			
Variable			
Indirect Labour	22,300		
Factory Power	8,000		
General Factory Expense	25,000	55,300	
Standing			
Factory Manager's Salary	5,000		
Fire Insurance—Factory	1,000		
General Repairs—Factory Buildings	2,000		
Depreciation of Machinery	5,000		
Depreciation of Factory Buildings	1,800	14,800	70,100
			335,000
Less Inventory of Work in Process as at December 31, 1936			29,000
Cost of Goods Manufactured			$306,000

THE SHAW MANUFACTURING COMPANY

TRADING AND PROFIT AND LOSS STATEMENT for six months ended Dec. 31/36.

By Sales—Cash	$ 2,300		
Credit	450,300	$452,600	
Less Outward Freight on Goods Sold	5,000		
Returns Inward of Sales	5,000	10,000	
Net Sales			$442,600
To Inventory of Finished Goods as at July 1		20,000	

Cost of Goods Manufactured		306,000	
		326,000	
Less Inventory of Finished Goods as at Dec. 31		62,000	
Cost of Goods Sold			264,000
Gross Profit on Trading			178,600
To Selling Expenses			
Salesmen's Salaries & Commissions	10,000		
Travellers' Salaries, etc.	6,000		
Expenses, Shipping & Delivery	4,000		
Expenses, Selling Department	8,000	28,000	
General Administrative Expenses			
General Manager's Salary	8,000		
Salaries, General Office	13,000		
Directors' Fees	6,000		
Audit Fees	4,000		
Expenses, General Administration .	6,000	37,000	
Financial Management Expense			
Bad Debts	1,600		
Discounts	2,700	4,300	
Total Operating Charges			69,300
Net Profit on Operations			109,300
Interest on Bonds			3,000
Net Income			$106,300

THE SHAW MANUFACTURING COMPANY

STATEMENT OF EARNED SURPLUS—AS AT DECEMBER 31, 1936.

By Balance Forward		$ 5,000	
Net Income for half year ended Dec. 31/36		106,300	$111,300
To 6% Interim Dividend Pfd. Shares.. 3 mos. to Sept. 30/36	$ 3,000		
To 6% Interim Dividend Pfd. Shares 3 mos. to Dec 31/36	3,000	6,000	
Interim Dividend—Common Shares—25 cents per share		10,000	16,000
Balance Earned Surplus—Available for Dividends			$95,300

THE SHAW MANUFACTURING COMPANY

BALANCE SHEET—AS AT DECEMBER 31, 1936.

ASSETS

Current				
Cash on Hand		$ 600		
Cash in Bank of Montreal....		20,000	$20,600	
Bills Receivable			25,000	
Accounts Receivable		280,000		
Less Reserve for Bad Debts .	$1,400			
Reserve for Discounts ..	2,800	4,200	275,800	
Inventories—				
Direct Materials		56,000		
Work in Process		29,000		
Finished Goods		62,000	147,000	
Deferred Charges			500	$468,900
Fixed				
Machinery		100,000		
Less Reserve for Depreciation		25,000	75,000	
Factory Buildings		60,000		
Less Reserve for Depreciation		16,800	43,200	
Land			40,000	158,200
				$627,100

LIABILITIES

Current			
Bills Payable		$ 9,000	
Accounts Payable		16,000	
Preferred Dividend Payable ..		3,000	
Accrued Expenses		2,600	
Accrued Wages		1,200	$31,800
Fixed			
6% Bonds			100,000
Net Worth			
Capital Stock			
6% Preferred—2000 shares of $100 par value	$200,000		
Common—40,000 shares of no par value	200,000	400,000	
Surplus		95,300	495,300
			$627,100

PROBLEM II.

THE SOCIETY OF CHARTERED ACCOUNTANTS OF THE PROVINCE OF QUEBEC

FINAL EXAMINATIONS, APRIL 1937.

ADVANCED COST ACCOUNTING—QUESTION 5.

The Cumberland Cap Company manufactures cloth caps of a standard design. In December 1935 the Manager decides to install an estimating cost system for use during the next year. He conducts certain tests of factory performance which yield the following data—

Approximately 25 pounds of cloth are used for each 100 caps. This cloth has been bought in scraps at an average cost of 60 cents per pound. Trimming and finishing materials have cost $5.00 per 100 caps produced. Labour has amounted to 80 hours per 100 caps, at an average wage rate of 50 cents per hour.

Production in 1935 totalled 60,000 caps. Operating expenses were —rent $3,000—light and heat, $400—power, $6,000— indirect labour, $10,000—factory supplies, $3,500—insurance $500—taxes, $2,000—repairs, $3,000—depreciation, $6,500.

Expenses for 1936 are expected to be similar except that power rates have increased 10 per cent. and taxes are expected to be 25 per cent. higher.

Prepare estimated unit costs by elements of cost for use in 1936.

Inventories as at December 31st, 1935, included the following—

Raw Materials—
1,500 pounds of cloth valued at 60 cents per pound.
Trimming and finishing materials valued at $2,200.

Work in Process—
4,000 caps—average half completed.

Records for the year 1936 show the following—

Caps completed and transferred to finished goods	62,000 caps
Cloth Purchased (17,000 pounds)	$10,200
Trimming and finishing materials purchased	4,100
Direct Labour (54,000 hours)	30,160
Rent	3,000
Light and Heat	500
Power	7,200
Indirect Labour	11,000
Factory Supplies	3,800
Insurance	600
Taxes	2,500
Repairs	4,060
Depreciation—Factory	7,000

Inventories December 31st., 1936.

Raw Materials—
1,800 pounds of cloth
Trimming and finishing materials valued at $3,100.

Work in Process—
6,000 caps—average half completed.

(a) Prepare statement showing costs of production for 1936.
(b) Record transfer to Finished Goods of Year's production at estimated cost.

(c) Compare actual inventory of work in process as at Dec. 31/36 with book inventory and adjust difference to Cost of Goods finished.

(d) Prepare, by elements, new estimates of unit cost, based on 1936 figures, for use in the Year 1937.

SOLUTION

THE CUMBERLAND CAP COMPANY (a)

	Charges Estimated for 1936 for 60,000 Caps	Estimated Cost per 100 Caps
Direct Material		
25 pounds cloth at 60c pound		$ 15.00
Triming and Finishing Materials		5.00
TOTAL MATERIAL COST		20.00
Direct Labour		
80 hours at 50 cents		40.00
Manufacturing Expense		
Rent	$ 3,000	
Light and Heat	400	
Power 6000 + 10%...............	6,600	
Indirect Labour	10,000	
Factory Supplies	3,500	
Insurance	500	
Taxes 2,000 + 25%...............	2,500	
Repairs	3,000	
Depreciation	6,500	
	$36,000	60.00
Total Estimated Cost—100 Caps		$120.00
Estimated Cost Per Unit		
Direct Materials	.20	
Direct Labour	.40	
Manufacturing Expense	.60	
TOTAL	$1.20	

THE CUMBERLAND CAP COMPANY (b) and (c)

Manufacturing Statement—for the Year Ending Dec. 31/36

To Inventory of Work in Process		
4,000 caps at ½ estimated cost—		
Mat. ½ of 20	$ 400	
Lab. ½ of 40	800	
Mfg. Exp. ½ of 60	1,200	$2,400.00

Direct Materials			
Cloth			
Inventory Dec. 31/35—1,500 lbs. at 60c	$ 900		
Purchases—1,700 lbs.	10,200		
	11,100		
Less Inventory Dec. 31/36—1,800 lbs. at 60c	1,080	10,020	
Trimming and Finishing Materials			
Inventory Dec. 31/35	2,200		
Purchases	4,100		
	6,300		
Less Inventory Dec. 31/36	3,100	3,200	13,220.00
Direct Labour—54,000 hours			30,160.00
Manufacturing Expense			
Rent		3,000	
Light and Heat		500	
Power		7,200	
Indirect Labour		11,000	
Factory Supplies		3,800	
Insurance		600	
Taxes		2,500	
Repairs		4,060	
Depreciation		7,000	39,660.00
			85,440.00
Less			
Transfer to Finished Goods			
62,000 Units at Estimated Cost of $1.20			74,400.00
Balance of Account—(to represent closing Inventory of Work in Process)			11,040.00
Actual Inventory of Work in Process at Dec. 31/36 at Estimated Cost			
6000 Units at ½ estimated cost—			
Mat. ½ of 20		600.00	
Lab. ½ of 40		1,200.00	
Mfg. Exp. ½ of 60		1,800.00	3,600.00
Difference between Work in Process Inventory and Balance of Account—to be added to Cost of Goods Manufactured and Transferred to Finished Goods			$7,440.00

THE CUMBERLAND CAP COMPANY

CORRECTION OF RECORDED COST OF GOODS MANUFACTURED AND TRANSFERRED TO FINISHED GOODS

Recorded Cost of Goods Manufactured and Transferred to Finished Goods	$74,400.00
Add Adjustment—due to error in Estimate	7,440.00
Adjusted Cost of Goods Manufactured and Transferred to Finished Goods	$81,840.00

THE CUMBERLAND CAP COMPANY (d)

MANUFACTURING STATEMENT—SHOWING ELEMENTS OF COST FOR THE YEAR ENDING DEC. 31/36.

		Cost of 62,000 Units	Now Estimated Cost per unit on Basis of 1936
Direct Materials			
D.M. in Inventory Work in Process Dec. 31/35—4000 caps at ½ of 20	$ 400		
Put into Process during the Period	13,220		
	13,620		
Less D.M. in Inventory Work in Process Dec. 31/36-6000 caps at ½ of 20	600	$13,020	$ .21
Direct Labour			
D.L in Inventory Work in Process Dec. 31/35-4000 caps at ½ of 40	800		
Put into Process during the Period	30,160		
	30,960		
Less D.L. in Inventory Work in Process Dec. 31/36-6,000 caps at ½ of 40	1,200	29,760	.48
Manufacturing Expense			
M.E. in Inventory Work in Process Dec. 31/35-4000 caps at ½ of 60	1,200		
Put into Process during the Period	39,660		
	40,860		
Less M.E. in Inventory Work in Process Dec. 31/36-6,000 caps at ½ of 60	1,800	39,060	.63
Cost of Goods Manufactured		$81,840	$1.32